The National

Future Farmer

Owned and Published by the Future Farmers of America

August - September, 1963

Follows like a shadow

NEW IH PLOW WITH PIVOT HITCH AND STEERING TAIL WHEEL GIVES AMAZING CONTROL, SHRINKS HEADLANDS

Don't look back, except to admire a good plowing job! This new semi-mounted steerable plow follows in the tractor tire marks... can't get you into trouble. Pivoting hitch automatically steers rear wheel for tight turns in field or lane. Gives you narrow, neat headlands with the greatest of ease.

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*Per tire.

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Kenneth Grove, Hanover, Penn. — "I saved close to $100 a set on Firestone Field & Road tires . . . and got more traction."

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J. P. Hodges, Bennettsville, S. Carolina — "Field & Road tires beat the road wear problem, deliver more traction than others."

Bobby George, Frisco, Texas — "Field & Road tires give me the traction I need. They slip less than higher-priced tires."

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Tom Cameren, Wilmer, Texas — "I used to wear out a set in one season. My Field & Road tires will last 50% longer. More traction."

Louis Bottrel, Hopewell, New Jersey —"I bought Field & Road tires for extra traction. They ride smooth on the highway, too."

Edward Dill, Platteville, Colo. — "Field & Road tires pull better in mud and sand. On hard dirt they'll do twice what other tires do."

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Joseph Young, Graham, Alabama —"I'm well satisfied with the traction. Field & Road tires take hold, let the tractor pull through."

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OUR COVER (Photo by Bob E. Taylor)—Summer brings back the show circuit to Future Farmers across the land. It's a time for clipping, currying, and advice from a busy advisor. For "Tug" Hamilton and Advisor Carlos Moore, show time near Chandler, Arizona, is no exception.

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The grand champion fat lamb has to have eye appeal. He needs to be blocked, trimmed, clean and bright. Under that fleece he needs to have pounds of solid lamb, too. Is this one ready? Gene Harfst, who feeds and cares for the lambs at the Danforth Farm Youth Center in Missouri, wonders himself. He doesn't really know what he's been feeding him—it was one of four experimental rations from the Purina Research Laboratories, identified only by a number. But this lamb and his group will be judged against three other groups on the other three experimental rations, as previous groups have been tested for many years past. Each winning group influences formulation of the feed made available to young showmen in the Checkerboard Bag. It's part of the continuous research at the Danforth Farm Youth Center aimed at helping showmen to capture more grand champion honors.

PURINA

Ralston Purina Company, Checkerboard Square, St. Louis 2, Mo.

"No substitute for PILOT BRAND OYSTER SHELL"

–says Jack Backman of Backman's Full O' Pep Hatchery and Backman Poultry Farm, Waterville, Minn.

"We tried another form of calcium carbonate as a calcium supplement for our 10,000 layers and production of sound marketable or hatchable eggs dropped way off. When we switched back to PILOT BRAND **Oyster Shell,** production went up to former high levels and excellent shell quality returned."

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Looking Ahead

CONTACT LENSES FOR CHICKENS

For the past few months, chickens around Santa Rosa, California, have been wearing contact lenses and acting like new birds. The red plastic lenses are fitted under the inner eyelid when birds are six weeks old; then everything they see becomes red and distorted. As a result, birds immediately become calm. No longer do they panic or become hysterical at noises. Because they cannot see blood, they do not pick each other, and debeaking is unnecessary.

SELF-PROPELLED CAMERA

Now researchers from the USDA have a camera that propels itself through underground drainage lines to locate clogged or damaged tile. The device is a 35 mm camera and electronic flash unit installed in a clear plastic tube about three inches in diameter. A reversible battery-operated motor and wheels move it through the lines. When the unit is taken off the experimental list, farmers will no longer have to dig up entire drainage lines to find a leak.

RADIATION RETARDS SPOILAGE

It might not be long before you buy vegetables that have been treated with radiation to keep down spoilage. Scientists from the USDA and the Atomic Energy Commission have found that controlled doses of radiation kill or slow down bacteria that cause fruit to spoil. Even perishable peaches and strawberries retained their original quality after treatment. Tests so far show fruit to last one fourth longer when radiation is used.

NEW CROP ON THE HORIZON

Virginia farmers have a new crop to grow this fall. The off-season crop, called Upland Cress, is becoming popular among canners and consumers alike. Not seeded until late August, the new crop yields from November through the following April. For this reason, plus its resistance to cold weather, the market potential seems unlimited. It can yield from 8,000 to 10,000 pounds of greens per acre.

MEAL IN A MINUTE

After 13 years of research, food experts of the Comidex Corporation have developed a food bar only three inches long that is a completely balanced meal for people in a hurry. The new discovery contains 23 natural foods, plus vitamins and minerals, and satisfies a complete meal requirement. Its preservation process assures freshness even after long storage. The foil-wrapped bars contain only 200 calories. Cost of the condensed meal is no more than an average sandwich.

AUTOMATIC GRAIN FEEDER

An experimental device that delivers grain to dairy cattle on the basis of how much water they drink has been refined at the University of Illinois. Since there is a correlation between the amount of milk a cow gives and the amount of water she drinks, the automatic feeder meters grain into a trough from an overhead bin as water is consumed. As the water level drops, an electric motor turns on to deliver a predetermined ratio of grain to each cow.

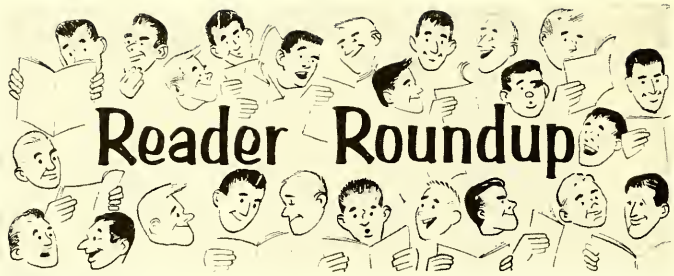
QUICK-FROZEN PORK

Meat processors are working on a method of spraying liquid nitrogen onto hog carcasses to quick-freeze them after butchering. If all is successful, pale, watery pork may be a thing of the past. The liquid nitrogen lowers the carcass temperature rapidly below that of a conventional freezer, preventing the development of soft, watery muscle. The procedure freezes only the surface of the meat.

Texaco Marfak can cut out breakdowns!

Idle equipment can play havoc with your harvest. You plan your crop for a profit. Then—wham!—a couple of unfortunate breakdowns stop you. And you're in the red. Marfak could have saved the season. Marfak, Texaco's hard-working lubricant. It protects against breakdowns. Stays in bearings and seals out dust, dirt, and mud. Doesn't pound out. Doesn't dry out when the going is hot and heavy. Resists rain and dampness. Keeps your equipment working longer under the grueling conditions of farm work. Your nearby Texaco man has Marfak—and all the other top-quality Texaco petroleum products you need. See him soon. On the farm and on the highway, it pays to *trust the man who wears the star.*

TEXACO



Newcomerstown, Ohio

Would you please send me the free booklets that I have underlined. I didn't want to clip out the coupons because after I read the articles, I let other boys from another school where there is no vo-ag department read it over.

I like your Magazine very much. Its new ideas have helped me in my farming program.

Malcom Ott II

Prior Lake, Minnesota

I enjoy your Magazine very much and do not want to miss a single issue. Since I was graduated from high school in 1959, I look forward to it coming in the mail. I have stayed on the farm, and the articles have been helpful to me. The stories of other Future Farmers who, like myself, have stayed on the farm show what can be done when you put your mind to it.

Since last March I've been on my own, as I purchased my father's property and rented a farm of 144 acres from my grandfather. I like to think that your Magazine and my being a member of the FFA have helped me to decide to stay on the farm. When I received my State Farmer Degree in 1959, I decided that farming was what I wanted, and I worked for the day that I could have a place of my own.

James Volek III

Aurora, Indiana

I will be a senior in high school this fall and have been in the FFA for three years. I received the Hoosier Farmer Degree this past spring at the Indiana FFA Convention at Purdue University at Lafayette.

I look forward to receiving *The National FUTURE FARMER*, and especially enjoy your interesting and informative articles on wildlife.

Eddie Gordon

Oakdale, Louisiana

I read your article on fishing a farm pond and enjoyed it very much. I fish farm ponds a lot, and am always looking for information on how to catch the big ones. I'd like to thank Mr. Kennamer for writing this, for it's the first one I've found on the subject.

Joseph Soileau

New York, New York

The presentation on page 54 of your June-July issue entitled "Potash—The Misnamed Fertilizer" caught my eye and contained some inaccuracies which I felt should be pointed out to you and your readers.

The second paragraph states in part that "Although the name potash is used in commercial fertilizers, its true name is potassium carbonate . . ." Potassium carbonate finds extremely limited use as a fertilizer source of potash. The major source is muriate of potash, which accounts for over 90 percent of the fertilizer potash used in this country.

Balance and unlock feed nutrition

GIVE THEM THE

Help your animals get more nutritional power from their ration—and *balance* their rations, too: Feed Milk-Bank Feed Boosters by Kraft.

Pex products for poultry, Kaff-A Milk Replacer for calves, Kaff-A Booster Pellets for ruminants, Kraylets for swine, and Pace for horses. They're all made with milk by-products, rounded out with other vital nutrients. They produce faster, more economical gains, better health and resistance to stress, better productivity. And they do all this by adding the extra nutrition of milk by-products to the ration, and by unlocking more nutrition from the other elements in the ration.

Milk-Bank Feed Boosters are storehouses or banks for the key nutrients of milk: lactalbumin protein, milk sugar, vitamins, minerals and important growth factors—elements not found in ordinary grain rations, pasture, or roughage.

Write for details on feed programs with Milk-Bank Feed Boosters. KRAFT FOODS AGRICULTURAL DIVISION, 500 Peshtigo Court, Chicago 90, Illinois.

The third paragraph, in noting raw material sources of potash in this country, does not mention sylvinite ore, which supplies over 90 percent of the fertilizer potash produced in this country annually. This is the ore currently mined in the Carlsbad area of New Mexico and in Canada.

The last paragraph states in part, "But today the world's largest producing area of potassium salts, from which potash is obtained, is around the Dead Sea in Palestine." According to the Minerals Yearbook, the U. S. is the single largest producing country.

We would be pleased to provide any additional information which you might wish to have on potash production.

Edwin C. Kapusta

Thanks so much, Mr. Kapusta, for this additional information to supplement the illustrated page in our last issue. We know Future Farmers appreciate being brought up to date on these facts.—Ed.

Ferndale, Washington

I would like to comment on the article on machinery investment in the April-May issue. You state that if you own a corn picker and your neighbor has a combine, you should pick his corn and he should combine your grain to reduce machinery investment. Well, it just doesn't work that way. We have 300 acres of green cannery peas and 140 acres of grass with 50 dairy cows. When it is time to bale hay, we have our own baler and don't have to wait for our neighbor.

And it's the same with a combine. So if you feel a young man who wants to get into farming should impose upon his neighbor, I highly disagree. But I don't recommend that he go head over heels into debt. With farming as it is, it is almost impossible to pay out. If he wants to farm, he should look around and pick up the necessary implements at used machinery dealers to carry out his farming operation.

Jerry Benson

Future Farmers: Why did you choose agriculture as a career? Your reasons would be most helpful to others who are making a career choice. Send us your comments and your letters will be considered for next Reader Roundup.

Basin, Wyoming

I was very much interested in Judy Moses' article "Sweethearts' Checklist for a Good Date," and would like to add a few comments.

I feel a good date is one who has the qualities Judy mentioned and who is also willing to share. A boy who may not be a very good scholar but who tries his best at his school work gains far more respect from girls than one who doesn't. So the efforts put into education count.

Also I am proud to say that I am Basin's 1963 FFA Sweetheart. I would like to hear from other chapter sweethearts, too. My address is Box 301.

Linda Stule

Franklin, Kentucky

I would like to have your booklet "The Turning of a Century" for background material on our food surplus. I need this booklet for information on a speech I am making in our FFA public speaking contest. The title will be "Food Surplus—A Blessing or a Burden?"

Michael Meador

Findlay, Ohio

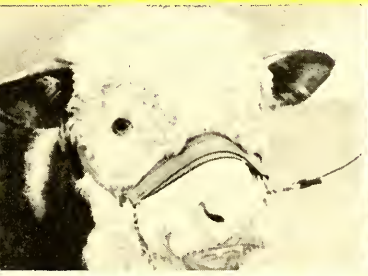
I have enclosed payment for two years of *The National FUTURE FARMER*. I think the Magazine is one of the best we get.

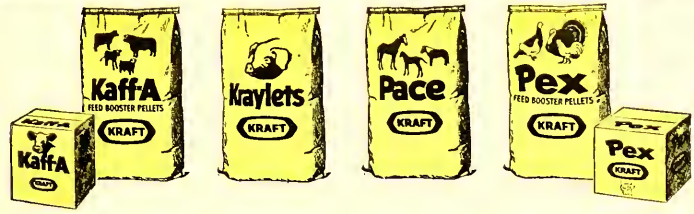
Although I dropped vo-ag last year, I am still active on the farm. We farm around 240 acres between my father, brother, and me. Our FFA chapter at Van Buren High School has been very active in pest hunts, soil judging, cattle judging, and many other activities.

John Waggoner

MILK-BANK BOOST

Milk by-product feed boosters by Kraft





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Your Editors Say . . .

MORE farm boys are members of the Future Farmers of America than ever before in the history of the organization. New membership figures just released report a total of 395,812 members for the fiscal year just ended. This is 7,820 over last year and about 18,000 over five years ago.

These members are located in approximately 8,500 local chapters in high schools throughout the 50 states, Puerto Rico, Virgin Islands, and Guam. Texas continues to be the largest state association with 39,702 members. Other states in the top membership group include North Carolina, 24,005 members; Georgia, 18,341; Oklahoma, 16,944; Tennessee, 16,220; Alabama, 15,785; and Illinois, 15,760. In all, 35 states reported an increase in membership during the year.

This increase in FFA membership—which also reflects an increase in the number of students studying vocational agriculture—shows the faith of rural youth in the future of farming and all agriculture. In commenting on the membership increase, Dr. A. W. Tenney, national FFA advisor, said: "It shows that farm boys are realizing the wide horizon of opportunities that are available to them in the broad field of agriculture. As in other industries, there is no satisfactory place in modern agriculture for the unskilled and untrained worker, manager, or operator."

It is also significant that this increase comes at a time when the number of farms is decreasing but when the need for trained men in agriculture has never been greater. It takes a trained farmer to cope with the complex problems of modern agriculture—when he must know everything from the latest insecticide to kill the pests that plague his crops to market quotations on what he produces; when terms like capital investment and depreciation must be known and understood in making his management decisions. And it comes at a time, too, when training in agriculture is increasingly important for those who supply farmers and process and market farm products. With about 40 percent of our work force engaged in the industry of agriculture, there are many opportunities for you and other young men with training in vocational agriculture and FFA. Let us hope that the American people will fully appreciate this manpower resource being trained in agriculture. It is our insurance for a continued abundance.

A call to your National FFA Convention has been issued by National President Kenny McMillan. The dates are October 9-11, and the place is the Municipal Auditorium in Kansas City, Missouri.

This will be the thirty-sixth annual convention of the world's largest farm boy organization. Nearly 10,000 Future Farmers and their advisors will attend. It is a marked contrast to the first convention held in 1928. Meeting then were 33 official delegates from 18 states.

The National Convention is the highlight of our FFA year. If you attend, be sure to get the most you can from the educational experience and inspiration it provides.

Wilson Carnes, **Editor**

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It takes *action* to feel like a man. Takes *pride*, too, and good, skillful *training*. Join the modern Army's Combat Arms program and you'll have all three.

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21—Best Drivers Make It Look Easy— Want to improve your driving and have more fun at the same time? This glossy-backed booklet uses typical driving problems and photographs to help you react like a "pro" in traffic. These answers and many more make this good reading for teen-age drivers. (Chevrolet Motor Division)

22—Lightning Facts and Figures — Lightning strikes the earth 360,000 times an hour and causes 60 million dollars in farm losses each year. Here in 20 pages are what lightning is, how it reacts, and how you can insure your farm's safety from its dangers. (Lightning Protection Institute)

23—Mineral Feeding Facts—Put this handy supplement in your vo-ag notebook for easy reference! Fifteen ready-punched pages take the reader through facts on phosphorus and calcium and tell how to assure a healthy herd through mineral feeding. Here's a complete mineral program outlined from A to Z. (Darling and Company)

24—The Case of Pedigreed Livestock— Livestock breed associations worked together to prepare these 24 pages on the advantages of pedigreed livestock. Included are sections on crossbreeding and dual-purpose cattle. Besides some pertinent facts on livestock breeds, names and addresses of the member breed associations are listed. (National Society of Livestock Record Assoc's.)

25—How to Select, Use, and Care for Wood Bits—At last a handy-sized booklet on wood bits that can hang above the workbench for easy reference. There's a wood bit for every purpose, and you can learn how to select and use it best with this booklet. Ways to sharpen and store bits to lengthen their life are included. A handy storehouse of information. (Irwin Auger Bit Co.)

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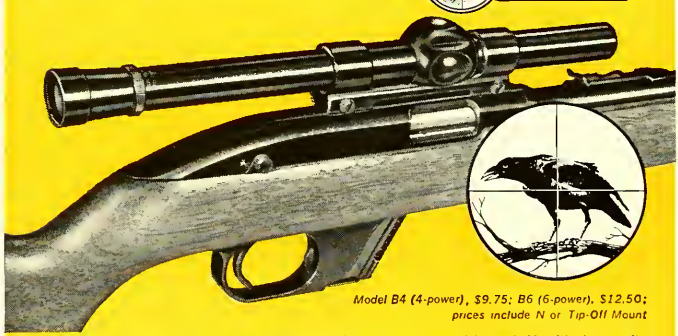

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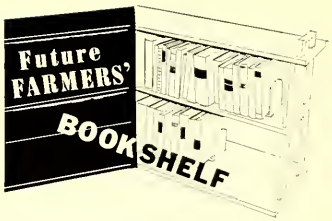

THESE new books are reviewed as a reader service. If your local bookstore doesn't have them, write directly to the publisher and mention *The National FUTURE FARMER.*

Farm Business Management (Auburn Printing Co., Auburn, Alabama, $2.50)—In 170 pages this paperback traces farming from its place as an industry to how you can gain success as a farmer. Covers all aspects from how to get started, where you can get credit, analyzing your farm business, and marketing your products. It's deep reading, but contains a wealth of information all beginning farmers need to know. Written by three Auburn University professors, it will make a wise library addition.

Back Country Poems (Vantage Press, Inc., 120 West 31st Street, New York 1, New York, $2.00—Here is a hardbound collection of poems about farming and out-of-doors that can be enjoyed time and time again. Author John L. Gwaltney pictures true-to-life instances of the fields, farmhouse, and animals in rolling verse for all ages of country-minded folks. Such subjects as "Farmers' Plight" and the "Bear Creek Parson" help tell of his simple rural setting.

Miracle Gardening (Bantam Books, Inc., 271 Madison Avenue, New York 16, New York, 35 cents—A soft-cover edition, this book by Samm Sinclair Baker tells how to substitute the newest chemicals for the spade and hoe to get results never before thought possible. Growth stimulators that make tulips the size of melons, foliar fertilizers get results overnight, and hormones that speed flowering by 10 to 20 days are all discussed in this publication. Even insecticides and weed killers for healthier plants are included.

Cross Fire (Doubleday and Co., Inc., 575 Madison Avenue, New York 22, New York, $6.95—The story of Ezra Taft Benson's eight years as Secretary of Agriculture under Eisenhower. Secretary Benson relates the inside story of his experiences as the most criticized member of the Cabinet, and how he was one of only two men to last all eight years of Eisenhower's two terms. "Our God-given freedom is dying," Benson writes. His book should hold the interest of all those who have an interest in American agriculture.

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One of the most convincing examples of the performance, dependability and economical operation provided by PC rings is the fact that more award-winning* truck and bus fleets use Perfect Circle rings exclusively than any other piston ring brand. This was true in '62, as it has been year after year.

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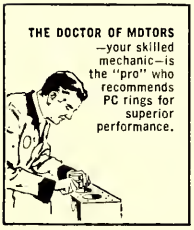

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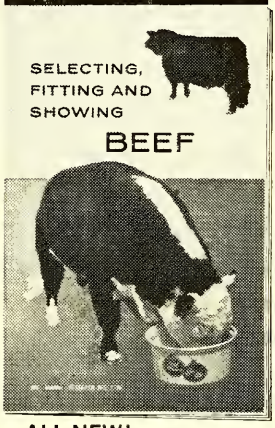

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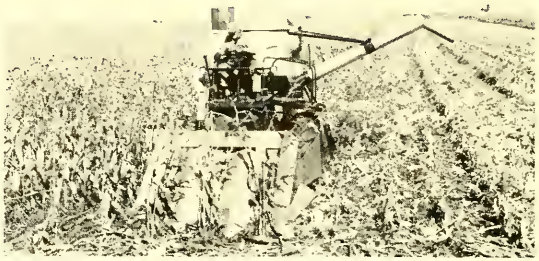
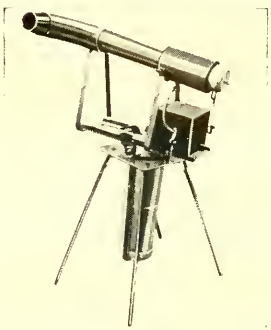
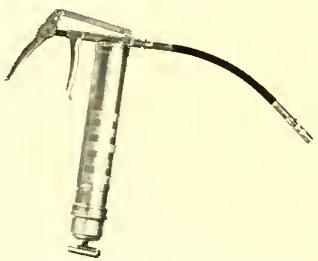


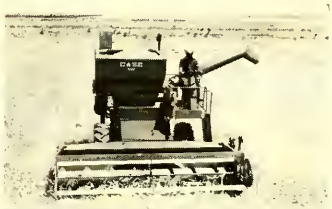
M. First three-row corn head offered by farm equipment industry. Designed for Model A Gleaner self-propelled combine, will pick rows from 28 to 32 inches wide. Weighs approximately 1,770 pounds. (Allis-Chalmers Company)



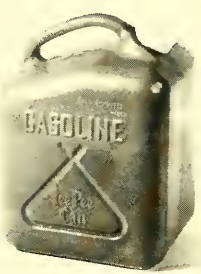
N. Portable bird scarer rotates to protect 40 acres. Safe. (Alexander-Tagg)



O. "One-Handy" grease gun has pistol grip for easier, quicker one-hand use. Is ideal for hard-to-get areas. (General Grease Corp.)



P. Model 700 combine for grain, beans, corn. Tank is 55 bu., 40 inches wide. (J. I. Case)



Q. "Tee Pee Can" is of safe plastic. Leakproof spout, makes it ideal for tractor. (Technical Plastics Company)

R. Storage bin for shelled corn is fiber glass-plastic to prevent spoilage. Several sizes, permanent color. (Pitts. P.G. Co.)

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See the new Nylon Power-Grip tire at your B.F.Goodrich Farm Tire Service Center. The B.F.Goodrich people will be happy to show you our complete line of tires for farm service and answer any question you may have on farm tires and how you can get longer, more efficient service from them. Your B.F.Goodrich retailer is a good man to know. Stop in and meet him soon. *The B.F.Goodrich Company, Akron 18, Ohio.*

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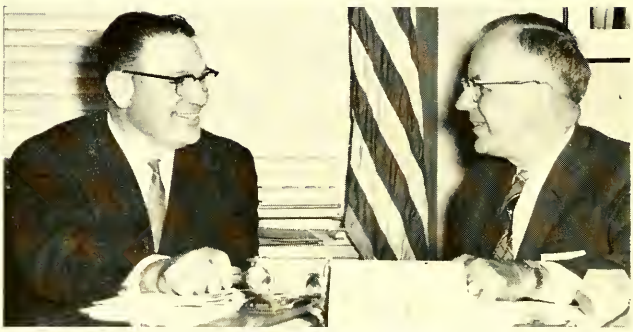
NYLON TRACTOR TIRES

photo roundup

Kenny McMillan steps in to present Ann Richardson an award denoting her sweetheart of the Trinity-Neches, Texas, FFA livestock show.



A prominent booster of the FFA stops to chat with National Advisor Tenney. He's Donald McDowell, director of Wisconsin's department of agriculture. A former state FFA officer and American Farmer, McDowell still owns a farm.

Six Future Farmers from one chapter, Quincy, Washington, received State Farmer Degrees at the state FFA convention. The event was a milestone for Advisor Keith Kirkbride.

Minnesota regional cow clipping winners watch Champion Charles Lund receive a trophy from Princess Kay of the Milky Way. He outlasted 600 other Future Farmers to win.

Bill Foster and Dick Gregory of the Fresno, California, Chapter put finishing touches to their vo-ag shop-built welcome sign. It stands near their school town, Easton.

"I dig the new Falcon Hardtop... and these wheel covers really sail"

See you later, gladiator, in the brand-new '63½ Falcon Hardtop. There's new scatback styling, racy new roofline, and new V-8 ginger under the hood. Add bucket seats and console, or conventional seats, and you've got the unconventional, lively Falcon Hardtop.

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d-CON®
PAYS 50¢ EACH FOR BOX TOPS

Easiest Way Ever for Your Chapter to Make Big Money

The makers of d-CON, long time leaders in the war against rats, are launching this big SAVE-A-TOP campaign to dramatize the vital need in farm communities for effective rat control. You as a Future Farmer can play a leading role in this campaign and earn big money for your FFA chapter.

There's nothing to sell, no contest to enter. All you do is collect box tops from d-CON READY MIXED and PELLET packages and give them to your chapter leader. For every box top, your chapter will receive 50¢.

Because d-CON sells millions of boxes of READY MIXED and PELLETS a year, fortunes are waiting to be collected. Be sure your chapter gets its full share. Chances are you use d-CON on your own farm. So collect box tops there and on neighboring farms as well. You may also want your local stores to collect box tops from customers buying d-CON. Both d-CON READY MIXED and PELLETS come in thermo-sealed bag inside of box, so box tops can be torn off right at store and bait will still stay "factory-fresh."

And think of the things your chapter can do with all this money. It can even pay your chapter's travel expenses to next fall's annual convention.

HERE'S ALL YOU DO!

1. Collect d-CON READY MIXED and PELLETS box tops.
2. Be sure your FFA chapter is registered with d-CON for BOX TOP MONEY.
3. Turn box tops over to your chapter leader. Your chapter receives 50¢ for each box top.
4. Box tops must be sent to d-CON no later than November 30, 1963.

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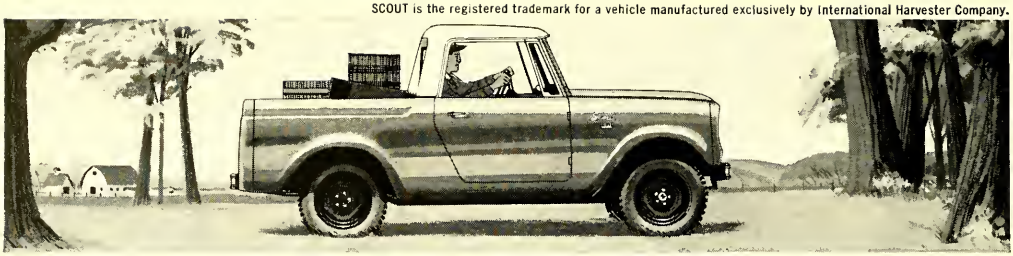
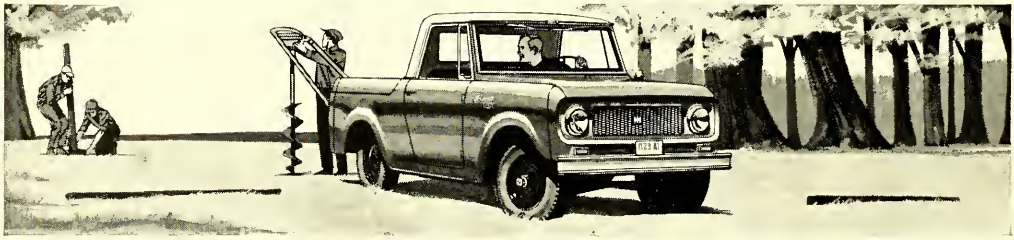
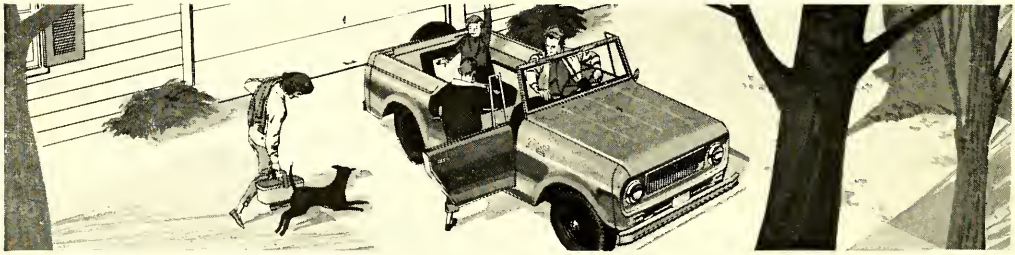


Running errands...



digging post holes...



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The SCOUT is high enough off the ground so you don't get hung up in rough going. Reliable power — 93 hp comes from the 4-cylinder COMANCHE® engine. Regular gas only. All-wheel-drive (or rear-wheel-drive) gives it the "go" you need, roads or no roads.

You can fit the SCOUT with a snow plow, power take-off, winch, trailer hitch, any one of six tops (steel or vinyl), even bucket seats and a full-width removable back seat.

THE Scout® II®
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How's that for a vehicle that'll also dig post holes with ease? Look the SCOUT over at an INTERNATIONAL Dealer or Branch.

LEARN TO BE A LEADER

by
Wm. Paul Gray
National FFA
Executive Secretary

LEADERSHIP has played an important part in the development of our civilization. History provides examples of men who believed that the group should make its own decisions by democratic leadership. This same way Future Farmers are provided opportunities to engage in leadership practices and become good leaders.

Every officer in the FFA was a Green Hand at one time and came up through the ranks of the organization. Leadership just doesn't happen but is the result of members being inspired by others, accepting the challenge to become a leader, setting goals, and then assuming group responsibilities.

The old adage, "Leaders are born, not made," does not apply to the FFA. It is important that Future Farmers become aware of their leadership qualities. One of the reasons the FFA has continued to "hold its place in the sun" as a rural youth organization is because of the continuous supply of leaders developed from within the ranks. Each year thousands of members receive such training in leadership training schools and conferences, supplemented by self-instruction by advisors and other officers.

When a member attends a leadership training school, he should be properly dressed as he is at FFA meetings and before civic groups. The character of the FFA is judged by the actions of the members and the activities in which they engage. Training for FFA leadership will be improved if members become familiar with how and why the FFA operates through reading the Official FFA Manual and *The National FUTURE FARMER*.

There is no best way to conduct leadership training; therefore, the planning committee should determine the areas of training needed with the most appropriate activities. Generally the following areas are excellent for group leadership discussion:

1. What are the qualities desired in good FFA officers?
2. How to assure the election of good officers.
3. What are the duties and responsibilities of good officers?
4. What items in the FFA should officers study and know?
5. How to make the installation of officers meaningful and impressive.
6. How to plan and hold good committee meetings.
7. How to plan and conduct a challenging program of work.
8. How to plan and hold good FFA meetings.
9. How to finance FFA activities.
10. How to keep FFA records.
11. How to conduct a good public relations program.
12. How to plan and conduct a parent-son banquet.
13. How to effectively serve as an officer.
14. How can we measure how well we are doing in FFA?

A well-planned leadership training school provides Future Farmers with an opportunity to learn how other members solve problems and conduct responsibilities. Therefore, when a Future Farmer attends with the proper attitude and desire to learn, there should be little difficulty recognizing characteristics of a good leader. Members will learn that the success of an FFA group depends upon well-qualified, enthusiastic officers who devote time and service to the organization.

Through participating experiences under the guidance of competent officers and advisors, members learn how to perform the duties associated with each office. Observe how experienced officers delegate responsibility and help others develop leadership through participating activities. Understanding how to plan a challenging program of work will become meaningful when it is based upon the needs of the group and when "teamwork" is used to accomplish the goals.

The future leader is taught that FFA meetings must be well planned, held at a regular time, follow an established order, and use parliamentary procedure to maintain interest and good attendance to assure good results. When a member fully accepts responsibilities, he makes a contribution toward self-improvement and he lightens the load of all members.

Many leadership schools have radio or TV directors to assist members in developing programs. Newspaper editors give valuable help in FFA news reporting, while other resource persons often give training in public speaking and keeping records.

An officer serves as a symbol of the FFA group, and the Future Farmer attending a leadership training school should observe capable officers demonstrating good leadership. Good officers develop pride in helping future leaders learn to perform their duties to the best of their ability.

Attending a leadership training school should provide you with many "working tools of leadership" to be used with FFA groups. A member should develop himself by "keeping physically fit, mentally awake, and morally straight." Study the Official FFA Manual, read current events and your FFA Magazine to keep informed, and develop self-confidence to help you make sound decisions.

Be fair to all, and assume your share of responsibilities in performing tasks for the welfare of the group. Show a willingness to work with others to develop tolerance and understanding, while keeping a high regard for the rights and worth of others. Strive to improve your ability to communicate by practicing public speaking and parliamentary procedure in FFA meetings. Be friendly, sincere, and interested and spread your enthusiasm for the FFA so others will be motivated toward leadership. Any goal you set or activity you participate in should improve the FFA program and continue to develop strong, competent rural leaders of the future.

The advisor is the key person in leadership training, even though he appears to play an inconspicuous role. He helps members identify their leadership abilities and gives guidance and counsel on how to cultivate them. The effectiveness of the FFA in leadership training can be measured by how members identify their problems, establish worthwhile goals, develop plans in the Program of Work, and then evaluate the results.

There are both pleasure and rewards in FFA leadership. ◆◆◆

Lyle Rader SCORES AGAIN

Four years after becoming Star Farmer, this Washington Future Farmer continues to set new farming records.

By
Ruth Jurich

HUSKY, six-foot Lyle Rader, Star Farmer of America back in 1959, is living proof of the meaning and value of FFA experience. The Fife, Washington, Future Farmer's Blue Lake pole bean crop topped all national records this past year, making him the first man ever to break national records both on quantity of beans per acre and on the quality of the crop. And his sights are set even higher now.

Last year Lyle farmed over 122 acres of Puyallup Valley land in his home area of Pierce County, near Tacoma. Under his employ were 700 bean pickers, 10 tractors, and 5 trucks. Right in the midst of operations was Lyle, directing the harvesting from his radio-equipped pickup truck.

Now 25, Lyle looks toward the future with plans for streamlining his methods and increasing the entire operation, and with hopes of breaking his own records with the 1963 bean crop. Even more grateful for FFA training and guidance now, he told us: "I can't begin to estimate the help I received. I'd recommend the FFA program to any boy, whether he intends to become a farmer or not."

Advisor Glen Olmstead, Fife High School vo-ag instructor, who counseled Lyle all the way from a 14-year-old Green Hand to the organization's highest honor, said: "Lyle always had an open mind, an ability to think creatively, and was always searching for a better way to do things. The first thing that impressed me was that he was always willing to listen."

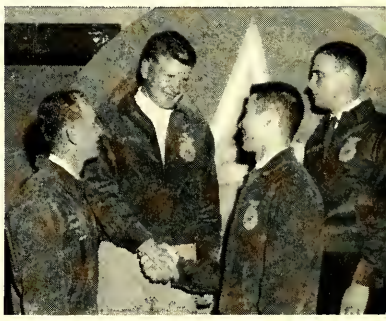
Olmstead smiled as he recalled the youth he had spotted as a "comer," and related how he and Lyle had worked together trying various crops to find the one best suited to the Rader family's lean, sandy 41-acre tract. It had never before supported anything but a small flock of chickens and a few grade cattle.

"Lyle's first crop of beans turned out wonderfully, but I honestly think it was because of the loving, intelligent care he gave them. From that small beginning, he's built up a $100,000 annual operation," Olmstead said. "He was an all-round fine student, clever with his hands, and especially good at shop. He didn't get all A's because he had so many outside interests and was working to help support his family." Lyle's father had died when the Future Farmer was in the seventh grade.

Shop training proved valuable to Lyle and has enabled him to perfect several inventions which have solved practical farming problems. His inventions include a machine for automatically setting out bean poles at a uniform height, one for stringing four rows at a

This 1962 pole bean crop set new national records for both quality and the quantity per acre. When he started vo-ag, he had only 41 unfertile acres.

Three Regional Star Farmers congratulate Lyle on becoming Star Farmer.



Every piece of equipment gets Lyle's attention before the bean harvesting.

time, and another for watering alternate sections of a row of beans. As Lyle knows, when an entire row is watered at once, the weight causes the vines to sag.

Experimenting with fertilizers and pioneering with the use of trace elements have taken much of Lyle's time. He has worked out his own fertilizing formula which he applies by his own method, passing irrigation water through a container of chemicals.

"Organic material helps especially for improving soil texture," he told us. "But I'm sold on commercial fertilizer for nourishing plants. When you add chemicals, you can measure the exact amount, and you gain in yield directly in comparison with the amount you add."

Although Lyle's knowledge of scientific farming is so advanced that Olmstead says, "He could lecture to the professors," Lyle had to acquire his skill the hard way—without a college education. "I wanted very much to go to college, but I had built up a sizable operation that I knew would go to pieces if I left it for four years," was his reason.

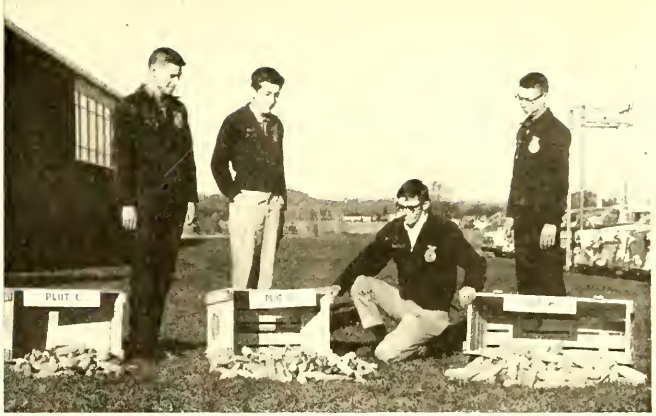
Lyle gets a lot of information by reading a wide variety of farm publications in his spare time. "I enjoy articles dealing with all kinds of farming, not just bean farming," he said. "You can never tell where you might run across a good idea."

As with many successful people, Lyle is completely sold on his chosen line of work. He would rather grow beans than do anything else in the world and is convinced that his area offers the best soil and climate conditions for their culture in the entire country.

Why does he prefer beans? A one-season crop, there are no plants to nurture through the winter, and when the poles are stacked and vines plowed under, he can sometimes find time to go hunting. But even in winter there are tasks requiring a small crew. Lyle has worked out an agreement with a local packing house to top-dress his fields with manure from their barns.

"But the main reason I like raising beans is that they are totally unpredictable," he explained. "No matter what you do, you can't tell for sure from one day to the next just how your crop is going to develop. You need five or six solutions to every problem, and choose the one that happens to fit."

Now with a comfortable home built on the edge of his bean fields, Lyle and his mother, who is also his business partner, have an eye to the future. Today he is the outstanding bean grower of Pierce County, Washington. Tomorrow . . . well, only time and the limits of his initiative can tell.



Proof that adequate fertilization pays off is shown here in yield of Plot A.

TEST PLOTS PROVE A POINT

Boyertown Chapter's spring activity attracted the attention of the community.

A BASIC principle of vo-ag education is learning by doing, and Future Farmers at the Boyertown Chapter in Pennsylvania's Berks County took to the school farm last spring to prove a point.

As part of the spring activities, Advisor Walter McDanel and his Future Farmers decided to start experiments with fertilizer application on the chapter land. The Boyertown fertilizer test plots, as they came to be called, proved to be an experience for all those involved. Within the chapter, there were members who were skeptical of adequate fertilizer application and its benefits to a corn crop. These Future Farmers would have to be shown.

Realizing that they possessed limited knowledge of conducting a scientific experiment, Boyertown's members made the rounds to contact resource men in the local community. The local Farm Bureau Cooperative furnished a specialist in crops and agronomy to help set up a planned procedure for the plots, and the students pitched in to make it a success.

The three acres of land lying along Montgomery Avenue nearby were divided into three equal parts: Plots A, B, C. Before any individual attention was given to the plots, 500 pounds of ground limestone was applied per acre. Now members could turn their attention to making each of the plots prove or disprove their point.

Plot A received 480 pounds of 45 percent Urea per acre as a source of nitrogen; then members disked in 320 pounds of 0-20-20 fertilizer over the plot. When the May 10 planting date rolled around, 175 pounds of 5-15-5 fertilizer was applied with the seed. At the rate of 21,450 plants per acre in 38-inch rows, Plot A yielded an amazing 118.75 bushels per acre.

Turning to Plot B, the Future Farmers decided that no plow-down fertilizer would be used. However, they did apply 175 pounds of 5-15-5 fertilizer at planting time. Again using the 38-inch rows, with a 21,450-plants-per-acre rate, the final yield came to 42.2 bushels per acre, down almost two thirds over Plot A.

Plot C received no fertilizer at all. With the identical planting rates used here again, members measured only 31.6 bushels of corn from this acre.

Looking back over the growing season, Advisor McDanel recounted that the season was hampered by a lack of moisture. Very little rainfall was measured during the entire corn season, but Plot A with adequate fertilizer showed reduced losses regardless. Weed control was brought about by a chemical herbicide and one cultivation, and was fairly successful.

Interested community leaders and citizens stopped by the fertilizer plots from time to time to see for themselves the work of the Boyertown Future Farmers. The local public began to realize more fully the constructive, active enterprises that their blue-jacketed neighbors worked with, and before long community relations were at a new high level.

Looking back on October 30, the day the members harvested the 25.4 percent moisture corn, Advisor McDanel saw more than another project completed. He saw Future Farmers and their community learning that scientific agriculture is the backbone of modern farming.

Agriculture...

The agriculture of our grandparents' generation had a much different look. Follow us as we compare past with present.

THEN and NOW!

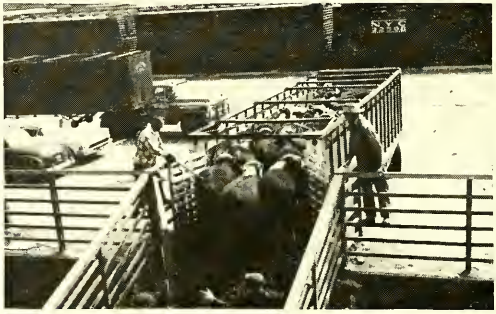
Driving hogs through muddy streets to market was common when this was taken in a small town about 1900.

The pigs' lot is much better today, as they are transported on modern trucks. Water sprayers keep them cool inside.

NEARLY 100 years ago American agriculture started into an era of mechanical change that was destined to mold it into the most productive in all the world. The American farmer of the mid-nineteenth century had the steel plow and the reaper, and would soon have teams of steam tractors to plow his fields.

As thousands of rural people left farms to work the rapidly expanding factories, the farmer was expected to produce more food and fiber. This he did, and by 1920 he was supplying food for eight people.

From crude animal-drawn plows and livestock drives to a modern 214 billion dollar industry with the latest in machinery, chemistry, and marketing, American agriculture celebrates the birth of a new era. We join the USDA in looking back over a century of progress.



THEN and NOW!

Cattle drives began in 1805 when corn-fed beef was driven from the Ohio Valley to eastern markets. When this drive got started in 1900, cattle were driven to railway stockyards.

Modern cowboys are actually truck drivers who transport about 90 percent of the cattle to market. Cattle arrive in better condition from longer distances with this lift.

No effective insecticides were available to Swain Finch in 1890 as he tried to control grasshoppers in his corn.

Any farmer can now buy chemicals to control the harmful pests. Airplanes spray large areas in a matter of hours.

THEN and NOW!

THEN and NOW!

THEN and NOW!

Steam tractors were a decade old when these two plowed near Beach, North Dakota, about 1900. Each required a fireman, someone to carry water, and $15 an hour to run.

The change from animal power to tractors came slowly, but as engines improved, more farmers used them. By 1950, more tractors than horses were on farms for the first time.

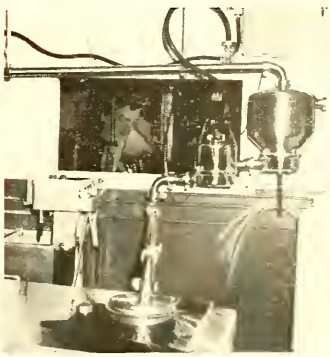
THEN and NOW!

When Cyrus McCormick of Virginia patented this reaper in 1834, grain harvesting time was cut in half. It marked the era of machine-age farming that doomed hand labor.

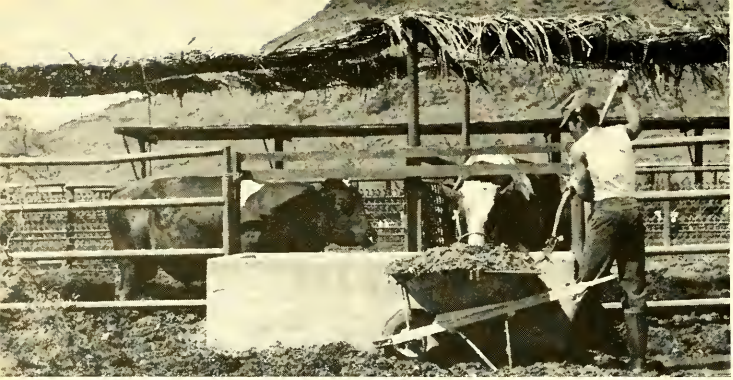
Efficient combines like this one enable one man to cut and thresh 42 acres of wheat in a 10-hour day. Farmers can now feed 8,000 new persons a day on less cropland.

THEN and NOW!

Dairying has changed since 1903, when this farmer milked his skinny cow in a bucket beside the barn. Artificially bred cows now produce 12,000 pounds of milk through stainless steel pipelines to modern milking and cooling units. One farmer now milks dozens of cows.



USDA Photos



Scooping feed for a pair of hungry bulls is only part of Francis Alcuran's work.

Abraham Manuel inoculates a calf for Harvey Johnson of the Moanalua Farms.

On-the-job Dairymen

Vo-ag students on Hawaii's Oahu Island are learning to become dairymen through on-the-job work.

By
Ronald Goben

WAIANAE High School on the island of Oahu is one of the most modern and attractive high schools in the state of Hawaii. Add the fact that Waianae is in the heart of Oahu's dairy cattle country, and it's easy to see how the school came up with what Hawaiian officials believe is the only training program of its kind for boys interested in a dairy career.

This semester 12 selected vo-ag seniors at Waianae are receiving on-the-job training in dairy work at eight commercial dairies in the area. They leave for their jobs at about 1 p.m. daily and receive full credit for two class periods while they're working. They also receive an average of $75 a month for their work at the dairies.

Before the youths began their on-the-job training, however, they put in a full semester of classroom study on all aspects of dairy farming.

Kazuo Maeda, vo-ag instructor at Waianae, teaches the classroom courses and also works as a coordinator with the dairies to make sure the students are getting the proper training on the job.

"We've had terrific cooperation from the participating dairies," said Mr. Maeda. "They're very anxious to see the program succeed."

As a matter of fact, it was the dairy industry leaders themselves who first suggested the training setup to Mr. Tamotsu Horii, state FFA advisor, two years ago when they envisioned a lack of trained men in the industry.

After some discussion, school and dairy officials came up with a program operated jointly by the high school and the industry. Funds for the project are contributed by the Milk Producers Association, a group that includes most of the major dairies on Oahu.

So far the program has paid off just as well as its sponsors had hoped. Of the 12 youths in the original class during the 1961-62 school year, three are now employed full-time in dairy work.

"That's 25 percent and it's what we're aiming for," said Mr. Maeda. "When you consider that most boys go right into military service after graduation, it's a high percentage."

The boys in the program are selected carefully. "We make sure a boy is really interested in dairy work, for one thing," said Mr. Maeda. "And they must have a good school record, too. I make spot checks on them at the dairies, just to make sure they're really working. They usually are. We've had good boys in the program both years."

Once they're selected for dairy training, boys spend two class periods a day for the entire fall semester studying all phases of the dairy industry.

Classes stress feeding, breeding, and milking, but they also take in management and record keeping. Students learn details about breeds of dairy cattle, how to raise calves, and what the stomach of a cow is like.

"We use a lot of films in our class work," said Mr. Maeda, "and we also get a lot of people in the industry to come in and talk to the boys. They're very willing to help out that way, and they can answer questions that might never come up in routine classes."

When the students leave the classroom for the dairies in the second semester, the aim is for them to get practical training in all phases of dairying covered in class. Naturally, some of the larger dairies are better able to train the boys in all aspects of the job. To make sure students get the benefits of a well-rounded program, they are shifted between dairies about every six weeks.

Chores such as feeding the calves are just as important as specialized tasks.

One of the best training setups is found at Moanalua Farms, which has 25 to 30 full-time employees and can give the boys practical instruction in everything from feeding to inoculation of cattle against disease.

The boys receive $1.00 an hour, plus their school credits. They normally work four hours a day, five days a week.

Even with time off for sickness and school holidays, the boys in the program can easily earn $75 a month. Like most high school seniors, they have plenty of use for the money. Some are saving to buy cars; others spend the extra cash on girls.

More important, though, they're getting training and experience that could pay off in a lifetime career. Few high school classes can offer more. ◆◆◆

HOME FARM, Incorporated

Not every farmer can benefit from incorporating his farm. But have you looked into your own situation?

EVER DREAM of becoming a director of a corporation? Or have you wanted to hold shares of stock and vote in the operation of one? Well you don't have to pack your bags and move to the big city to do it; you may be able to organize your father, brothers, or even Mr. Smith from down the road into a farm corporation.

But above all, the farm corporation, if properly planned and worked out, may help you reduce gift and death taxes; divide the farm's value without upsetting the everyday mode of operations; and give you, the farmer, such tax-deductible fringe benefits as group insurance and a retirement program.

Of course, as with almost any business, there are many problems to be worked out. First of all, it's best to find out just why you might want to look into forming a farm corporation.

First reason could be because you are one of several brothers who will farm the family acreage. Partnership with a large group is often impractical because of the complex division of costs and receipts without shares. Another important reason is that one partner can be held responsible for debts contracted by another. In a farm corporation no one shareholder can be charged with debts of another.

A second reason could be that you, as a young farmer, lack adequate credit to finance a successful farming business. By forming a corporation, you may be able to match your land or farm holdings with a local businessman who is agreeable to invest money in a farm corporation. Stock would be issued, the money used to modernize the farm, and both you and the businessman would share in the policy-making.

Still another reason might be that your father wants to gradually pass the farm to you and your brothers over a period of a few years. By incorporating the farm, he could pass shares of the farm to you and your brothers until the farm was completely transferred. In most cases, gradual transition such as this would save estate and inheritance taxes in comparison to a "one-shot" farm transfer.

Let's take an imaginary farm operation which consists of 350 acres of crop and pasture land, and has 30 acres of fruit orchard adjoining. Your father wants to take you and your older brother into the farm by forming a corporation; yet he wants to retain the orchard for himself.

Your first step would be to get information explaining the farm corporation laws in your state. This may be available from the local extension office. If not, a farm-experienced lawyer should know. You need a minimum number of incorporators—this varying with your state's laws. You will then have to file articles of incorporation with your state's secretary or his equivalent. As you can guess, the initial procedure will require a lawyer's assistance.

Now you are ready to declare the value of the farm operation and issue stock in that amount. This stock, of course, will be issued between you and your father and brother. Most likely, your father will want to retain the majority and give you and your brother options on buying shares. At this time, you will also need to elect directors and officers, who will more than likely be yourselves.

The law requires that you have at least one stockholders' meeting a year with complete minutes. Your farm records will have to be complete and accurate, and you will need a corporation name, such as "Dale View Farms, Incorporated." You will find a federal stamp tax on the stock you issue. This amounts to 10 cents per $100 of stock value, so if you issue 500 shares at $100 per share, you will have to pay $50 tax. In addition, there are filing fees and recording fees, so that you can figure on paying in the neighborhood of $300 to incorporate. A small annual fee is usually your only continuing corporation expense.

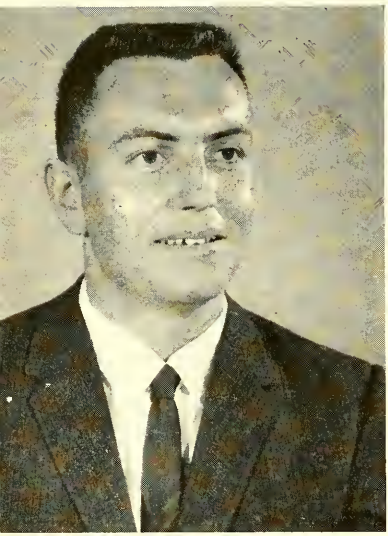
Your father has declared only the 350-acre farm into the corporation, so his 30-acre fruit orchard, although part of the original farm, is not included. He can still retain individual ownership, free from corporation management and control.

Now you, your father, and brother are shareholders in "Dale View Farms, Incorporated." The corporation is a legal being and has most of the rights of a person. State law providing, it can exist forever, even if one or more of the stockholders die or pass out of the corporation. There is no worry with reorganizing through the courts if the elder member dies. The corporation is now liable for all debts and liabilities contracted in the farming operation. No longer can you be held responsible for a partner's debts. You can now be eligible for employee benefits similar to large companies. Tax-free medical benefits can be subscribed to, and you can charge sick pay and social security to the corporation with tax-free benefits. In addition, a retirement plan whereby the corporation pays into a pension fund for your retirement can be exempt from income taxes. And going along with this, if you or your father dies, your beneficiaries can be paid tax-free death benefits up to $5,000.

The farm corporation is operated by joint management decisions, usually made through meetings of the stockholders with the officers and directors. If, after a period of years, the stockholders decide to dissolve the corporation, this can be done by checking with the state's laws. Usually it takes unanimous written consent by each stockholder, plus a dissolution report filed with the state's secretary.

As you can see, farm corporations have both advantages and disadvantages. Not every farm can profit from incorporating, for extra costs of social security or possible income tax disadvantages can be prohibitive in small corporations. However, neither is it true that only very large farms can incorporate. It may pay you to consult with a lawyer. A farm corporation could pay you in the long run. ◆◆◆

YOU CAN WORK your way through COLLEGE



Garrey Carruthers

Garrey Carruthers lacked money but not determination for a degree. Part-time jobs can be your answer, too.

EACH YEAR two million of America's brightest youths decide not to go to college. Millions more who are capable of doing good college work also drop out of school after the twelfth year, some of them to join the unemployed. A frequent reason given by these young people is "you have to have a lot of money saved up to consider college."

This notion is wrong. Take Garrey Carruthers, a Future Farmer from Aztec, New Mexico, for example. This former state FFA president has been self-supporting for all four years of his college career and, at the same time, maintained an outstanding scholastic record. Why not let Garrey tell you his own story:

"I became involved in agriculture early in life by helping my parents with the farm and dairy. So when I entered high school in Aztec, I enrolled in vocational agriculture. Through working with my parents, I had 50 percent of 32 dairy cows, 3 acres of corn, 3 acres of hay, and 10 acres of small grains by the time I joined the FFA.

"After graduating from high school in 1957, I enrolled at New Mexico State University on a $250 Sears-Roebuck Foundation Scholarship and got a job in the University dairy milking and feeding cows. In 1958, I was selected president of the New Mexico FFA Association and received the New Mexico Farm Bureau Award for leadership at the National Farm Bureau Convention in Boston.

"My father died during 1958, and I stayed out of college to help my mother with the dairy and to take care of my duties as president of the State FFA Association. During this time, I helped my mother operate the dairy on a percentage basis and received my American Farmer Degree in October, 1959.

"But I realized that I needed more education, and with the advice and help of my mother, I returned to New Mexico State University in 1960 to major in dairy. I borrowed the money to return to college for my registration fees, beginning payments for the dormitory, and meals at the cafeteria. I then got a job at the University dairy, besides being an attendant at a service station in nearby Las Cruces.

"With the increased responsibility of working and a desire to get an education, I improved my grades during 1960 and received both the $100 Price's Creamery Scholarship and the $500 Ralston-Purina Scholarship. In 1960, I began working in the Physical Science Laboratory, which has a contract at White Sands Missile Range. This work plus my scholarships paid my way through school.

"In May, 1961, I married Katherine Thomas, and a daughter was born in June, 1962. After my marriage and the birth of my daughter, my grade point average went up to 3.108 out of a possible 4 points.

"While I was in college working and going to school, I still had time to take an active part in the Alpha Zeta Fraternity, the Dairy Club, and the Block and Bridle Club.

"I believe that any FFA member who has a desire can find work at his university to get a college education. He will likely have to sacrifice the time and fun that most boys have who have the money to attend school. But I feel that I have gained by working my way through college and that I will be better qualified now to meet the problems of life than if somebody had financed my way through school.

"I hope more FFA members will go to college, even though they do not have the money. Where there is a will, there is a way to get that college degree."

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Sideline Profits With

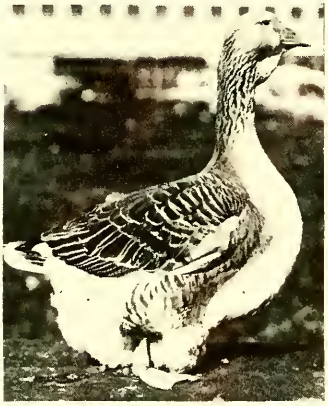
Geese

You don't need a lot of land, equipment, or money to raise geese as a sideline enterprise. And careful management can net you profits plus enjoyment.

By E. M. Leffert

A LITTLE mash, some land, a bit of corn for fattening, and you can be in the goose business. Since geese are grazers, they are relatively simple to raise. Grass, weeds, and other vegetation make for such speedy growth that some waste land away from garden and cornfield can point the way to profits for you. Raising geese can be pretty easy, and with a little extra effort, you can round out your wallet.

Today mixtures of the Toulouse and Embden strains are commonly seen on farms. One young gander and two



A long-time favorite among goose fanciers is the large gray Toulouse hen.

females are best mated in the fall of the year. Two-year-olds usually produce the best. As next spring rolls around, you will find that they have accepted each other. Then as long as fertility remains, leave such matings alone—they will be for life.

Grown geese are so rugged that they require no special protection from the elements. An open shed will do the job well enough for anything except extremely severe weather. But dogs or foxes can mean big trouble—you may want to give some consideration to a

These young Canada goslings often net $50 per bird as adults from fanciers.

simple enclosure for after dark protection. In time of deep snow, give them some hay or fodder, and maybe some waste apples.

An old barrel with some straw can serve as an excellent nesting spot if you can convince the hens of this. They are notorious for building their nest beside a placed barrel with trash they have gathered for the purpose. Usually eggs are laid early in the morning, so watch closely. Successful growers oftentimes take the eggs and give them to Plymouth Rock hens for hatching, since hen geese often break their eggs and trample their young. A Plymouth hen can handle four eggs. Besides, it's more profitable to keep a goose laying, if possible. Some will lay 40 eggs in a season. Oyster shells and mash—fed before and during the breeding season—are most helpful. You will find the incubation period to be 28 days.

After the goslings hatch, put them in a box where it's warm. They will need to dry off quickly. Give them food and water as soon as they can stand. If there are a few dumb ones, show them how to eat by dipping their bills in the water and food. Goslings like cottage cheese, lettuce, and mash. These youngsters don't require as much warmth as chickens but need protection from cold and wetness until feathers develop over their backs. Then it's usually clear sailing from that point on. While a stream or pond is desirable, it is not really necessary. Plenty of drinking water and shade is, however.

White Embden geese rank among the best and are a profitable breed.

The birds will clean up missed ears of corn found lying around a husked cornfield. Such activity will help fatten them for Thanksgiving Day—your first opportunity for dividends. Christmas and New Year's are the times for real money, however. In many parts of this country a goose feast on these days is a deeply imbedded tradition. Butchers and chain stores will be anxious for your supply if you are wise enough to make early contacts.

Even the "one-man" ranch can have a sideline. Fancy breeds find ready markets from collectors usually located in the classified sections of magazines. With experience, many can be sold through mail order. Remember, fancy birds can justify fancy prices. Wildfowl fanciers will purchase about all you can produce. Canada Geese, for example, are pure gold in this field, often bringing as much as $50 per bird.

Be sure to check out required permits or licenses before getting involved in such a venture, however. While Canadas are tougher to get to know and learn about, it's not an impossible task. Maybe your advisor can put you in touch with an experienced person who can tell you.

Goose raising can be a rewarding experience in non-monetary ways, too. As an added bonus there is always the enjoyment of hearing their call, of watching alert "heads up" ganders guarding a grazing flock from danger. And just who could ever forget the sight of a flock of geese on parade—with their stiff-legged dignity? ◆◆◆

"YOU CAN . . . if you think you can"

From a humble start with sheep, Kenny went on to be national FFA president.

National FFA President Kenny McMillan learned he would have to taste defeat before winning success.

By Paul Weller

THE FATHER bent over with the small orphan lamb and gave it gently to his seven-year-old son. Now the boy would have his very own project to care for. The time was the early 1950's; the place was a 160-acre rented farm near Prairie City, Illinois; and the boy was Kenny McMillan.

Kenny raised that first lamb, sold it, and invested the money in a registered Hampshire ewe to start his own sheep enterprise. His sheep flock grew over the next few years, and a start in farming seemed not too difficult a goal. But little did the shy and hesitant high school freshman realize that first day in vo-ag class that over the next five years he would have to experience bitter failure before success could be his. His story became one of faith and a strong refusal to accept defeat.

"I recollect how I used to sit and stare at the Foundation Award plaques on the chapter wall. I asked over and over how I too might win one," he recalls. This was the same boy who had dreamed of the day when he too could wear an FFA jacket like the older boys. It usually became the topic of discussion when he and his father, Keith, traveled home from vo-ag fairs in surrounding Illinois communities.

That first year in the FFA, Kenny did as any typical Green Hand would. He began to build a livestock enterprise. Sheep had been a McMillan trademark since Kenny's father had been a charter member of the Bardolph FFA Chapter 25 years before. Kenny's flock of eight registered Hampshires was his initial start. The hard routine of lambing from November through April, fitting from April until July, showing until September, and the sales in the fall became second nature to Kenny in his first year as a Future Farmer.

Kenny's fellow Future Farmers elected him chapter secretary at the beginning of his sophomore year, and his FFA future began to be shaped. It was at a sectional leadership training school that State FFA President Don Kimmel's speech lit a spark in Kenny's life. "Set some goals and work toward success" were Kimmel's thoughts, and 15-year-old Kenny McMillan went home that night with just that in mind.

Soon after, at the National Convention, Kenny sat at a breakfast session and heard the speaker expound on the influential "seven magic words"—"*You can if you think you can!*" The Illinois Future Farmer knew he had found a motto in this inspiring sentence.

The next two years in vo-ag and FFA were filled with an array of setbacks for Kenny McMillan. The time at the sectional fair that the proud Future Farmer led his heifer in front of veteran showmen, only to have her break away at the last moment. The time when Kenny was chapter president and overlooked an important requirement, keeping his chapter from winning its first "Superior" rating. Not long after, Kenny ran for sectional vice president and was once more defeated.

He tried for the Foundation Award in sheep production and once again lost at the state level. As a senior he tried again and this time didn't even make it through the district competition. But always there was his advisor, W. R. Thornton, who extended a protective arm and said, "Keep working . . . some day we'll win!" And never did Kenny forget those seven magic words when defeat seemed his fate.

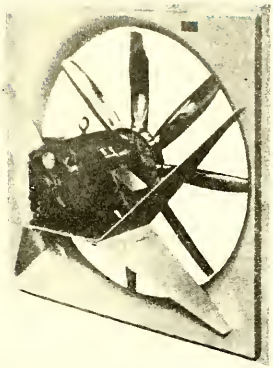
Public speaking was Kenny's favorite, and he entered the local contest. He went down fighting in the district finals. Once again he tried, and once again he failed to win the state title. But out of defeat Kenny saw that good experience was his award. He devoted his time to school activities and worked up to positions of leadership in committees, contests, and shows. With defeat for sectional vice president came election as sectional reporter, and Kenny got valuable experience as editor of the "Section 11 Future Farmer."

This experience added greatly to Kenny's election to state FFA president in 1961-62, and Advisor Thornton assured him, "We did win!" But all was not free of failure again for Kenny. His trips from freshman studies at the University of Illinois to FFA activities contributed to his "sinking" to failure in swimming class at school. Then, on leave from college, Kenny traveled to the National Convention as a candidate for national office. Eight times the committee interviewed him that week, but this time he didn't taste defeat. Kenny McMillan was named national president of 395,812 members of the FFA. His experience wasn't too unlike that of Abraham Lincoln, who lost nearly everything he attempted to do—except becoming President of the United States!

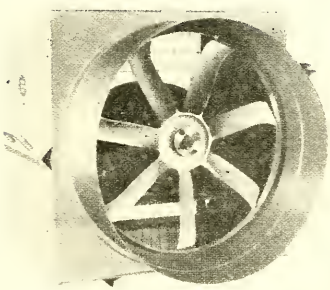
Since last November, Kenny and his family have moved to another farm five miles south of Bushnell, Illinois. On its 218 acres are 400 hogs, 80 head of Polled Herefords, plus corn and grain. An additional 180 acres is rented by Kenny and his 17-year-old brother, Eddie.

When Kenny returns to college after his duties expire, he will leave a lot of memories behind him. But something he will always carry through life will be the inspiration from the seven magic words. Without their guidance, he could not have become your national president. ◆◆◆

Fan Cooled Cattle



Typical electric fans that can easily be adapted for use in circulating air in closed-end sheds or through ducts.



Portable electric fan can be rolled into hot corners for instant relief.

Inexpensive electric fans for livestock ventilation are improving weight gains and carcass grades, says this researcher.

By Harold Stover

EVIDENCE is piling up in favor of fan-cooling beef cattle during hot weather. Cooling comfort is no different for them than it is for human beings. According to tests run in California and Florida, a good fan-cooling system in a pen or feedlot can encourage better weight gains and feed utilization, and this means a boost in net profit.

According to researchers in the areas where cooling has been tried, livestock are depressed by temperatures over 75 degrees. However, research shows that cattle in a well-ventilated pen gain better than those in a poorly ventilated one, even though temperatures are not lowered much by the air movement.

Where 42-inch diameter fans were installed delivering about 17,000 cfm in two cattle pens, the results were very favorable in promoting better gains. In two-year records, the daily gain average was 44 percent better where fan-cooling was used for the first year and 22 percent better the second. This is compared to no air movement. In addition, the cooling resulted in 30 percent and 19 percent, respectively, less feed per 100 pounds of gain for the two-year period.

The fans were located so that the cattle were constantly in the breeze. Fans were set to blow lengthwise of the shaded areas and in the same direction as natural air movement.

In another installation, steers were penned in two 30- by 40-foot areas in a pole shelter barn. One area had a 42-inch, 16,000 cfm fan set to run at temperatures above 75 degrees. The other area without a fan was used as a check.

In this test the fan-cooled cattle ate slightly more feed than those without a fan. However, the fan-cooled steers, due to heavier carcasses and slightly higher grade, returned a higher net profit of $3.32 per animal.

Other producers in many states are also claiming good results. The use of large fans in cattle sheds also is showing a reduction in the fly problem.

The use of a 42-inch fan operated by a one-third horsepower electric motor will cost approximately 12 cents per 10-hour day to operate. This is based upon a cost for electricity of 2 cents per kilowatt hour. The conventional type of attic fan as used in the home for attic cooling will work very well for such installations.

This ventilation system is also very effective for the farrowing house in hot weather. The air circulation needed is based on approximately 200 cubic feet of air movement per minute per sow and litter, or 15 air changes per hour, whichever is greater. The air flow should be directed so that no cold drafts are present on baby pigs, but with maximum air motion on the sows.

As farming becomes highly specialized and competitive, Future Farmers must turn to carefully planned records to help them farm profitably.

By
Paul Weller

THE full-time farmer you will become in a short time has taken on a new image. Now referred to as "the businessman in a blue denim suit," the modern farmer today runs a complex business where records and careful management are as necessary as tractors and plows.

With a farm investment running into five and six figures, the farmer needs a careful analysis to safeguard against unnecessary spending and low-yielding farm enterprises. Your best answer lies in good farm records; for only after proving an enterprise profitable through records can you expand with confidence. Working closely with records, the professional farm analyst, whom you may employ to study your operation, needs information of this kind to help determine which enterprises are the most profitable for your farm.

Several alternatives are open to you now as a Future Farmer to choose the record-keeping method best suited to your own farming situation. You will find that adult farmers in your community use a variety of ways to keep records—from professional management services to the back of the kitchen calendar. An informal survey taken among 26 midwestern farmers showed them to be keeping records in the following manner:

Bank Record Book	7
Farm Bureau Management	5
Purchased Ledger	4
Elevator Book	1
Notebook	2
On a Calendar	3
Loose in a Drawer	2
Check Book Only	2

It should be your responsibility to select a good method and learn how to use it with the help of your vo-ag instructor.

Let's take a typical FFA chapter in the farming community of DeKalb, Illinois. Here, as with most chapters, the Future Farmer works with a standard record book approved by the state vo-ag department. Advisor Robert Brown plans various blocks of instruction around the use of the Illinois Farm Record Book. Basically, this farm record book is a series of loose pages, combined to be used for receipts, expenditures, and a farm business analysis. Each enterprise can be kept separate, while room is left for figuring depreciation and inventories. Future Farmers receive the set of record books free as part of their vo-ag instruction.

Each farm record book in this particular class is closed out on December 31, and a new one started the first of the year. For four years DeKalb Future Farmers will work with both hypothetical and home farm problems. No doubt, your own chapter has much the same program to give you practical work with your locally approved record book. With this method, little or no outside help is needed.

This local record book will most like-

The father, Future Farmer, and advisor team is an excellent one to plan the method of keeping records on the home farm.

ly be the first method you will come in contact with for farm records. With it you do your own work, keep all summaries of farm changes, and can even make your own farm analysis. If after graduation you need help or guidance with this self-kept record keeping, your local Young Farmer class is a good place to go. In addition, with complete records in one of these books, any tax consultant can work with you at the end of of the year.

If your farm mortgage is held by a local bank, more than likely an agent from that institution will give you your second farm record alternative. One bank we know of displays this sign: "No Farm Records—No Credit." To get credit you must convince the bank that your farming venture is sound. Consequently, many banks appoint an agent to supervise and work with the farmer on keeping farm records. If you fall within this bank-audited type of record keeping, you will find that the agent makes periodical trips to your farm to provide assistance. Most often, the bank requests that you use their method for records. Fees for this service are taken from your net income reported to the bank where you owe your mortgage.

A third, and widely used method, is hiring the program of a professional farm mangement service. One example that we will use here is the Farm Bureau Farm Management Service used in the midwestern farming areas. With this method, you receive a record book from the professional fieldman who is assigned to approximately 200 farmers in your area. You make entries in the book much the same as you would in the vo-ag issued record. However, your fieldman will make from three to five visits to your farm a year to go over the book to make sure there are no mistakes. With this finished, he may even assist you in making such decisions as crop rotations, new farming enterprises, and more equipment.

When it comes time to close out this professionally audited record book, the fieldman assists you with this chore. Then your records are sent to a central point where they are analyzed and compared with other farmers in the state. You get back an idea of how you rank with other farmers with your size operation. The cost of this plan varies according to your acreage, with costs averaging from $50 up to $200, in some cases. This is just one professional record service. There are others, but the differences are slight.

Although you'll find variations in methods from state to state and slight changes in the farming operations, these three types of farm records will prevail in most areas. You, as tomorrow's modern farmer, will need to choose your own method of keeping and analyzing costs, receipts, and management decisions in order to successfully compete with the agricultural price squeeze.

◆◆◆

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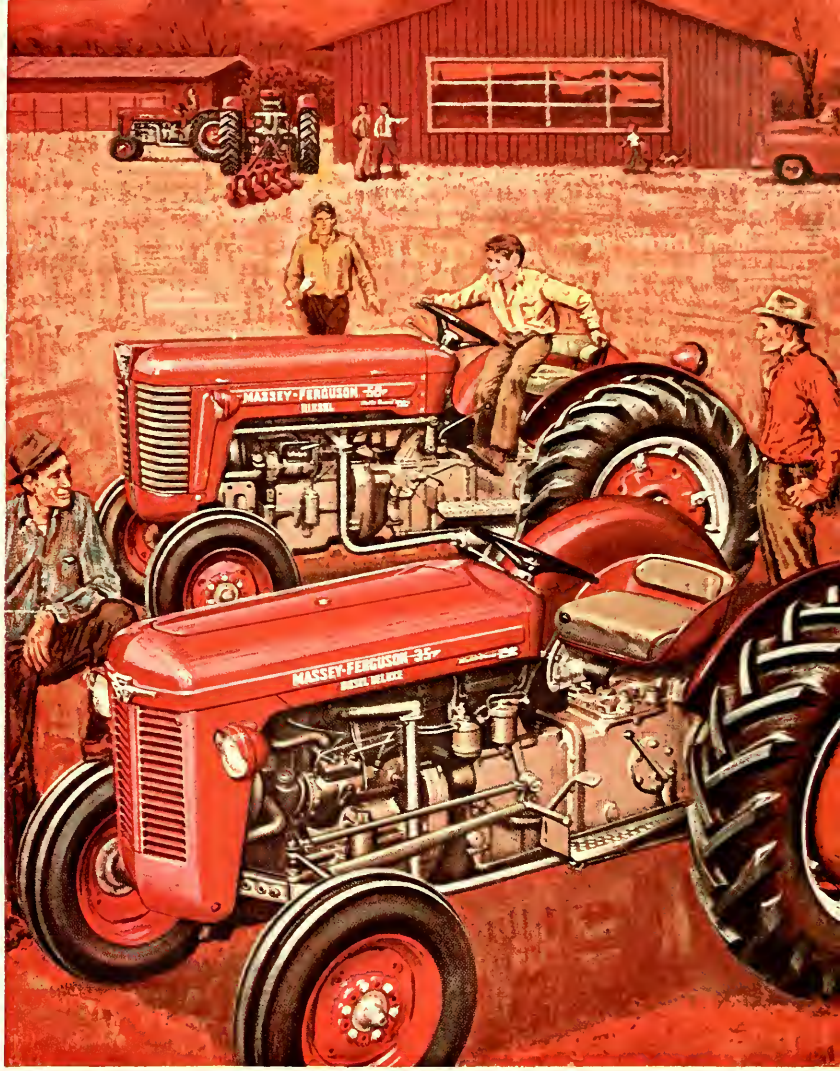

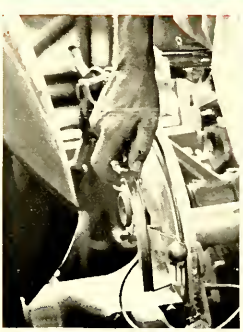

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A proven public relations project for your chapter
A fund-raising plan is also available.

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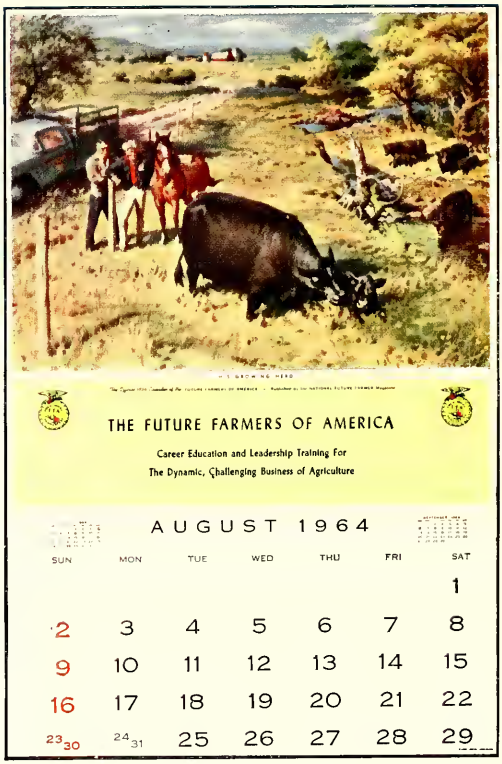
Make it easier to get business firms to sponsor your calendars on Plan A.

Desk Calendar

6¼" x 4" Tent Design. Perfect good-will gift for special friends. Date pad has 4-color photographs for each month.

Home & Office Calendar

Opens to 7¾" x 14½". A different 4-color picture for each month. Tells the Vo-Ag and FFA story the year 'round.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1
2 3 4 5 6 7 8
9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 30 24 31 25 26 27 28 29

Folding Poster Calendar

Largest size. Opens to 14" x 21". Attracts attention all year long. Ideal for hanging in cafes, classrooms, barbershops, and public places. Replaces old-fashioned roll-up calendar.

PICK A PLAN OF PUBLIC RELATIONS FOR YOUR CHAPTER

PLAN A Business firms can advertise their products and services on FFA Calendars through a sponsorship arrangement with your chapter. An optional fund-raising commission for the chapter on this plan.

PLAN B FFA Chapters and State Associations may order and give away or hang Official Calendars as a public relations activity.

PLAN C A special group of pre-imprinted calendars. May be ordered singly or in any quantity. No additional imprinting permitted. Priced lower than Plans A or B.

GET YOUR CHAPTER LISTED WITH THE OTHER TOP CHAPTERS PARTICIPATING IN THIS PUBLIC RELATIONS EFFORT FOR FFA.

WRITE FOR MORE INFORMATION

(Please indicate the plan that interests you!)

Advisors Please Note: Calendar project kits are not being sent to you this year unless requested.

CALENDAR DEPARTMENT, The National FUTURE FARMER
Box 29 • Alexandria, Virginia

By
Henry Ferguson

THE HYDROGEN bomb notwithstanding, there is nothing quite as perilous to the human race as insects. From earliest times, man and insects have been engaged in a struggle for domination. So delicate is the balance that such an insignificant thing as a change in the prevailing winds could be the edge these creatures would need to gain victory over us.

Two billion of these creatures swarm a square mile; yet, luckily for us, only 1 percent actually deserves the death penalty. Nature has endowed most of them with fantastic characteristics.

An insect, from man's point of view, is actually built inside out and upside down.

It has no bones and its skeleton is on the outside. Since this external skeleton is strong and pliable, the most fragile-appearing insects have astonishing durability. The Monarch butterfly, seemingly as frail as a feather in the wind, makes migratory flights from Canada to Florida and back again!

A dragonfly, carrying its long body on wings thinner than tissue paper, can zip along at 40 miles per hour. A mosquito can pump a meal from your arm, then take off carrying a payload twice its own weight. But to do so, its wing beat reaches a peak of more than 300 strokes per second.

Insects make a lot of noise. But they have no voices, for most have no lungs. Thus, they have no facilities for forcing air out through their throats or mouths to make vibrations.

Their "seeing" equipment is a marvel. Insects with compound eyes are almost impossible to strike, for they can see in every direction—behind their backs, in front, up and down—and thus elude all blows.

Sense organs are located everywhere. You'd knock a grasshopper stone deaf if you struck him on the front knees, for that is where his ears are. You'd deafen a hairy caterpillar by dousing him with water. Sound waves vibrating on its hairs gives it the sensation of hearing—wet hair won't vibrate. A cockroach carries his hearing equipment in his rear feelers, which are equipped with microscopic hairs that are bent over by sound waves.

Insects have assumed strange shapes and habits that enable them to cope with life under almost any circumstance. A drugstore beetle, for instance, thrives in red pepper; other insects devour and digest wood, paper, leather, and the repulsive substances of decaying bodies of both animal and plant life.

There are insects so tiny and so intensely specialized that they live only on the tongues of horseflies. There are others whose life span is so brief that they have neither mouths nor stomachs and never eat at all.

The rat-tailed maggot lives in underwater mud to a depth seven times the length of its body. It breathes air through a long elastic tail that pokes up to the surface, lengthened or contracted to fit the distance from its body to the water's surface.

Some bugs live in mud in hot springs that reach temperatures of 120 degrees Fahrenheit. Ice bugs thrive in temperatures of 38 degrees Fahrenheit. A few insects are capable of boring into metal.

Once there were giant insects in the world—cockroaches with a two-foot wingspread. And while circumstances have since whittled them down in size, their appearance has not changed in 40 million years.

Eating must be a glorious experience to most insects. Their sense of taste is developed far beyond that of the most sensitive humans. A human with the most delicately sensitive taste can detect, at best, sweetness of one part sugar in 200 parts of mixture. A butterfly can detect sweetness in a mixture of one part to 300,000. Insects merely walk over their "dinner tables" until they find the choicest morsel, for they have taste buds in their feet.

Man has just recently discovered the jet stream and is wondering how best to make use of it, but bugs apparently knew of these high level air currents long before man existed.

Ages before human life came on earth, these uncountable insect families were riding up and down and around our planet on the four winds, just as today.

It is not known how high insects can fly, but Perry Glick, research specialist with the U.S. Department of Agriculture at Brownsville, Texas, has been attempting to find out. His aerial research at varying altitudes over southern United States and Mexico has resulted in finding a spider, not equipped for flight, at 15,000 feet; big green darning needles at 7,000 feet—often zooming about an airplane as though challenging it to a race. Redleg grasshoppers, one of the greatest enemies to crops, were caught at 1,000 feet; crickets were picked up at 2,000 feet; book lice, the scourge of libraries, at 5,000 feet; and those undercover agents, termites, were discovered whizzing merrily along at 3,000 feet.

The family-raising possibilities of insects run into astronomical figures. For example, a single pair of flies mating in April would, if all their offspring lived, total 191 quintillion by August of the same year. This number would cover the entire earth's surface several feet deep. Without controls, this we could call "Messy Spring"!

Most insects, though, are fascinating, fabulous creatures worth our knowing.

Hunting FOR SALE

The sale of hunting rights and privileges has become big business in areas of the Texas range. It could give added dollars to farms everywhere.

By David Beatie

THE SALE of hunting privileges to city dwellers has been spreading rapidly as more and more farmers and ranchers discover the potential of this additional income. Texas is a good example of this fact, as Texas landowners received approximately 12 million dollars from the sale of hunting privileges last year alone.

In 1962, the Texas Game and Fish Commission issued 10,971 shooting preserve licenses. The acreage on which hunting rights were sold under license, according to the commission report, totaled 23,269,773 acres. That's an area larger than the state of Maine. Under Texas regulations "the landowner is required to purchase a shooting preserve license (fee, $5) if he accepts pay for hunting privileges."

The second classification requiring a license is the "shooting resort" — 600 to 2,000 acres—"on which game birds are released for hunting purposes." Fee for this license was $10 in 1962.

The 11,000 "shooting preserves" generally are ranches and farms from which the landowner is deriving revenue from sale of hunting privileges. Although the Texas antelope range would account for a substantial part of the total acreage, the number of landowners comparatively would be small because of the vast spreads of the West Texas and Panhandle ranches.

The majority of the hunters who pay these "shooting preserves" for hunting rights are after the Whitetail deer. Frequently quail and turkey hunting, where available, is included in the deer lease. The Game and Fish Commission estimates that in Texas, in 1962, a total of 220,000 Whitetail deer were harvested; only 6,000 Mule deer; and 1,970 antelope. It's the Whitetail that brings in the greatest revenue.

Only 690 deer were taken in 1962 on the six state-controlled hunting areas Thus, well over 200,000 deer were bagged on privately owned land. It is logical to assume that the greater part of this number was harvested by hunters who were paying for the privilege.

The 1962 Texas deer harvest put money in the pockets of Texas landowners. Thirty-five hunters, from our own small town, last year paid $4,350 for their respective five deer leases. Charge per rifle, among these groups, was either $100 or $125. (Some lease charges per rifle range upward to $175.) The ranchers owning the land covered by these five deer leases received an average of 75 cents per acre from these hunters alone.

One ranch, with which we're familiar, now grosses close to $1 per acre from sale of hunting rights. When one considers that oil companies usually pay $1 per acre annual lease for unproved land, hunt revenue in this amount is a substantial supplement to primary land revenue.

Much of the land today classified as "shooting preserve" was restricted to private hunting 20 years ago. The landowner's family, friends, and associates usually made up the entire hunter list. However, as the number of hunters increased, the landowner saw another source of revenue inherent in the land. So he leased the land for hunting to a group, to a company, or sold privileges to individual hunters on a daily basis.

Most of the daily hunting rates in deer country range from $10 to $25 per rifle per day depending on abundance of game, facilities furnished, and bag guarantee—if any.

Many chambers of commerce in deer country keep a list of landowners whose property can be hunted for a price. Other landowners advertise in newspapers and magazines.

Heavy die-offs in Texas deer herds during the late drought convinced many landowners that controlled harvesting was essential to healthy herds. Subsequently, many landowners working with game department personnel launched the antlerless deer harvesting program. Does were hunted on a permit basis. Thus, the Whitetail doe became an additional source of hunt revenue for the landowner.

The principal game birds in Texas—exclusive of waterfowl—are the quail and dove. Where cover and water are available, the landowner can increase the bird population by sowing grasses and legumes.

Quail, turkey, and deer for stocking purposes can be bought by the landowner. Some ranchers, outside of the natural Trans-Pecos and Panhandle ranges, now are experimenting with antelope. Other landowners have introduced Barbary sheep, and some "shooting preserves" have imported game from outside this continent.

With Texas hunting licenses hitting 502,363 in 1962, the one million mark undoubtedly will be reached in a few years. Unless the state or federal government purchases vast stretches of land for public use, hunters of the future must turn to the Texas landowner for hunting range. And the revenue from sale of hunting privileges may easily become a major, rather than a supplemental, source.

At a barbecue one evening this writer asked the rancher host how his cattle were getting along. The rancher's wife spoke up: "Never mind the calves—all he thinks about are the deer." ◆◆◆

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Mr. Advisor:

"How can I continue my education in agriculture after I graduate from high school?"

"Here by the Owl"

"LEARNING is a continuous process" and "You never get too old to learn" are quotes that are important in the agriculture picture today. Farming, with all of its ramifications, calls for "up-to-date know-how."

After your high school education come the out-of-school agricultural education classes. These classes are offered by your advisor for farmers in the community and are geared to fit your local farming needs. The advisor can also give you information about extension courses offered periodically for farmers.

Most states offer winter short courses at the state university. Farm boys who are interested in expanding their knowledge about farming can do so in off winter months. There are even several scholarships available for this kind of training.

A good improvement project for vo-ag students is a home library. This can be started when you enter the FFA program. Bulletins and leaflets can be collected and filed away for future use. A library that can give you information to solve your problems at a moment's notice is just as important as a hammer in the right place.

Robert E. Brown
FFA Advisor
DeKalb, Illinois

James L. Givens
FFA Advisor
Winchester, Virginia

"PLAN your life career and work your plan" should be the objective of every Future Farmer. Your plan should include as much education as you can possibly receive. Your plans should be made early in your high school program to help you attain your standards.

Foremost in your consideration should be to attend college. In the career of agriculture, regardless of your field, additional training beyond high school will help you succeed in your chosen occupation. There are definite academic requirements for entrance into an agricultural college. It is important that you start meeting these the first year of high school along with your vo-ag training.

Too many students give financial reasons as their excuse for not preparing themselves for college. Future Farmers with ability, initiative, and ambition can find this financial aid through scholarships provided at the agricultural college. A good academic record and vo-ag training in high school will enable you to continue your education at college.

For those Future Farmers who choose not to go to college, there are many opportunities for furthering education in the local community. The Young Farmer program is available to those individuals who have chosen farming as their vocation. In these classes you deal with problems in production, management, and leadership as you become established in farming.

For Future Farmers who choose other fields of agriculture, post-high school programs are being set up in many sections of the country. Also, special courses for specialized training in related fields are in operation. Your advisor can fill you in with the details.

One area of continued education that is often overlooked is self-education. You should begin establishing an agricultural library while in high school and continue making additions to it at every opportunity. Many fine publications can be secured free from industries, experiment stations, and local vo-ag departments. Frequent use of this library will be a valuable asset.

Future Farmers should wisely seek the advice of parents, teachers, and successful farmers as they plan a career in agriculture.

Emmett L. Tiner
Young Farmer
Consultant
Austin, Texas

WHEN you are out of high school and farming on a larger scale, the need for knowing the best possible way to do things becomes of paramount importance. In this day of technical agriculture, a young man who has no systematic plan for keeping abreast of changes will find himself an obsolete farmer.

One of the best ways to continue your education in agriculture after leaving high school is to join a Young Farmer chapter. Young Farmer educational programs are sponsored by vo-ag teachers in public schools. No set course is prescribed; however, each chapter has an educational program carefully planned by and for young farmers to train members to become more efficient in farming.

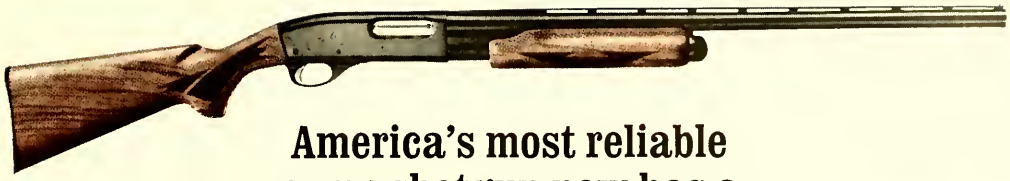
Many educational opportunities will be open to you as a member of a Young Farmer chapter. For example, facilities and specialists from colleges, experiment stations, research foundations, and testing laboratories are available for educational activities. In addition, personnel of agri-business, industry, and outstanding farmers in your community will be available to provide educational programs to give you the benefits of their years of experience.

As Young Farmer advisor, your vo-ag teacher can supplement and enrich these programs. You should keep in mind that many such educational experiences cannot be provided you on an individual basis.

Among the other ways to keep abreast in agricultural education is to participate in educational programs of various groups, such as field days sponsored by community agricultural organizations. In addition, you can attend non-credit short courses that many colleges offer for farm people. Your Young Farmer advisor can keep you posted on these courses.

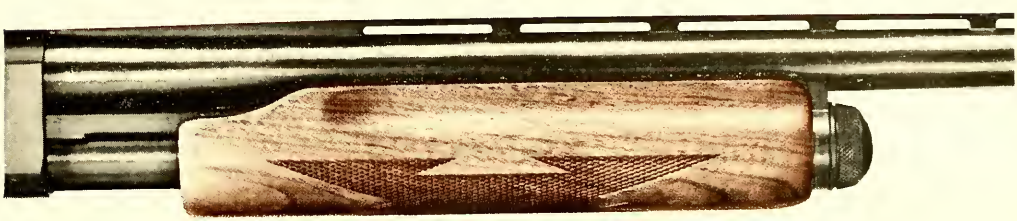
A lot of self-education can be achieved through the study of farm magazines, bulletins, and other agricultural literature. Education is a life-long process. Take full advantage of educational opportunities offered, and the chances are good that you will become one of your state's leading farmers.

If there is no Young Farmer chapter in your district, offer to assist your vo-ag teacher in organizing one.



America's most reliable pump shotgun now has a handsome new look...

Remington Model 870



Look what's happened to "Old Reliable"—Remington's popular Model 870 pump shotgun. Now it's made in one de luxe grade and it's a better value ... a better gun. It has a rich, new stock finish that looks great, lasts longer, too. Plus new, custom-grade fine-lined checkering to enhance the American walnut stock and fore-end. Topped off by a sporty, decorated grip cap. These extra good looks make it a standout over other shotguns.

Frankly, the newness ends there. We didn't do a thing to the *inside* of the 870. (No need to... it's the most reliable pump action made!) Look what you get: Double action bars (most pumps have just one) that prevent twisting and binding, insure smooth-gliding action. A receiver machined from solid steel. A breech block that locks into a hardened barrel extension for longer life... constant head space. And extra barrels you can change in seconds... in the field... without tools.

If you are among the nearly 1,000,000 satisfied Model 870 owners, you don't need a new pump shotgun... If you're not—see the new de luxe Model 870 "Wingmaster" today. You can't find better performance and better looks at a better price. 5 shots. From $94.95*.

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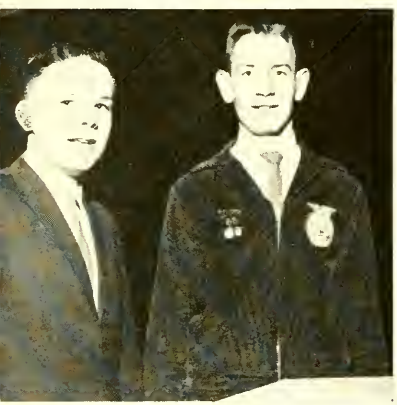
THE FFA IN

Across the U. S. A., "Learning to Do; Doing to Live; and

ALASKA — Fellow Future Farmers from the largest state, Alaska, stop to inspect grass test plots at the Alaska Agricultural Experiment Station near Juneau. The turfgrass breeding nursery that attracts these students' attention is conducting a program to evaluate different varieties for their potential in Alaskan agriculture.

Here Rick Pettit and Stan Smith from the Palmer Chapter note a diseased bluegrass planting under observation by Alaskan researchers. The first FFA chapter in Alaska, Palmer recently celebrated its sixth year of existence. Walt Ward is Palmer's advisor.



OHIO—Donald Cooper (left) and Tim Sonnenberg were announced winners in the memorized and extemporaneous divisions of the district public speaking contest at Pettisville recently, but few people were surprised. Both were members of the Holgate Chapter, winner for the past eight years of one or both divisions.

Last year, Lynn Rettig of the Holgate Chapter won the Ohio state contest, then went on to place fifth in the national contest at Kansas City. Winning over teams from 26 schools in the Pettisville district, Tim and Donald represented an area where 1,000 Future Farmers are trained in public speaking each year. Now it becomes their goal to retain the state title for the Holgate Chapter again this year.

KENTUCKY — The gamest guy we know is a 17-year-old Future Farmer from the Park City Chapter, David Wood. He won the Kentucky High School Athletic Association's "Game Guy Award" this year, presented to a student who has shown the greatest effort to overcome a physical handicap.

But looking over David's record as an athlete, student, Future Farmer, and church member, one would hardly suspect he has had to battle a physical handicap. When he was but two years old, he walked through hot ashes, burning both feet and causing one foot to be smaller than the other. In spite of this, he is outstanding in baseball, track, basketball, and football. He is now president of his junior class and the Park City FFA Chapter.

David's supervised farming program on the 227-acre home farm consists of dairy cows, hogs, corn, and hay. Determination to succeed is his watchword.

IOWA—Future Farmers from the West Bend Chapter stage an annual Pigeon Hunt that has three-pronged benefits. In nighttime hunts, the members go to farmers' barns where pigeons are nuisances and catch them alive. The activity is a great sport, but most important of all, it brings in money for the Palo Alto County Association for Retarded Children.

Fifty-four Future Farmers recently caught 589 pigeons which were, in turn, sold for $147.25. The live birds are shipped to hunting clubs down in Louisiana by a local firm.

West Bend officers, Robert Fehr and Leon Ludwig, say their members are happy to make this annual contribution to the needy children of the local community.

NEW JERSEY—State FFA officers took to the circuit this spring to conduct three leadership training conferences in various sections of the state. The general plan was for an afternoon session opened by chapter officers in the respective areas, then followed by officer meetings conducted by state officers.

A local milk producers group pitched in with a banquet late in the afternoon, and past delegates to the National Convention gave their reports. The meeting-filled evening session over, area chapter officers went home with a new understanding of their duties.

NEBRASKA — A project any Future Farmer could make in the vo-ag shop is an FFA bulletin board, so says David Hrbek of the Verdigre Chapter. The board is shaped like a large FFA emblem and can hold all types of awards and FFA announcements. Here's how David made his.

He traced an emblem onto a 47- by 36-inch piece of three-ply plywood. After cutting out the emblem outline, David wood-burned around the edge of the plywood. Then he drew in the five main parts of the emblem and wood-burned around these areas. After sanding and shellacking the emblem, David had a bulletin board of which to be proud.

ACTION

Future Farmers are to Learn; Earning Living to Serve."

LOUISIANA—Automation has come to the FFA judging contest at last! An electronic computer was used this spring to select the winners of the FFA judging contest at the Louisiana Polytechnic Institute at Ruston. The computer graded individual contestant cards, totaled individual and team scores, and selected all the winners in less than an hour.

In past contests, 15 to 20 people worked several hours doing this same job. Under the direction of the Louisiana Tech Agricultural Engineering Department, a total of 1,500 score cards were processed from 500 Future Farmers. Three card-punch operators worked for an hour and a half to punch the contestant placings into the cards, which could be used by the machine. Advisors and state office personnel were saved the work and worry of human error.

INDIANA—One Sunday afternoon last month a combined group of Future Farmers and Future Homemakers climbed aboard a bus in Indianapolis and headed east. They were making up the 1963 Youth Tour to Washington, sponsored by the Indiana Rural Electric Cooperatives that their parents support throughout the Hoosier State. Approximately 15 Future Farmers and a near-equal number of Future Homemakers toured everything from the White House to the Department of Agriculture, and then went home after a week to tell their friends. Before they left, they stopped in at the FFA Building, where a staff member caught one of their chaperones returning a valued camera.

KANSAS—When Vernon Mathes of the Harper Chapter received the Star Farmer of Kansas Award recently, he was only adding another chapter to his unique life's story. While only a junior in vo-ag, Vern's father decided to quit dairying and sold the entire herd to him. This gave Vern a complete Grade A production program with 26 head of registered cows and 16 young calves.

In spite of being busy with a complete dairy, Vern had time to place fifth in the nation in the James F. Lincoln Arc Welding competition, win a four-year letter in high school track, and go off on a People-to-People goodwill tour of Europe last summer. And besides that, he's president of the Harper FFA Chapter. All in a year's work for the Kansas Star Farmer, shown here with his parents and the farm's complete records.

ILLINOIS—When the Warren Chapter's advisory committee decided it was time to buy a new chapter pickup, Future Farmers started the wheels turning. Chapter members went to the local truck dealer and made arrangements to buy a new truck for invoice price. With the purchase was attached an agreement for the chapter to trade for a new truck again each year for $100, plus a reconditioning charge not exceeding $25.

The initial purchase was financed with a five-year Production Credit Association Loan. A nominal charge for mileage has made the truck self-supporting, while the chapter conducts activities such as a slave auction and seed corn sales to pay the loan.

Milo Sprout, left, and Steve Fillman are shown here putting a new canvas cover on the stock rack for hauling hogs.

MINNESOTA—Bill Bauer and Advisor Curt Nelson of the Hastings Chapter stand silhouetted against the sunset as testimony to another FFA community service. This past spring a soybean storage tank and a crude oil pipeline burst, dumping 2,500,000 gallons of oil into the Mississippi River near Savage. The result was a 100-mile oil slick that coated an estimated 10,000 ducks on the river.

Over 400 Future Farmers were alerted to help rescue the "oily boids," and scores joined the operation with flashlights after school hours. An assembly line was set up and the ducks were washed and placed in pens where they could regain their strength.

Under the supervision of Hastings Advisor Marvin Himango, Future Farmers rescued and scrubbed nearly 100 ducks before the operation was called off. The Future Farmers stayed with the task for 15 days.

C. L. Cook discusses with his father, left, and Advisor M. D. Shillings the rice acreage which he rents at $10 per acre.

Building A Future In A Rice Field

Everyone thought a rice project to be impossible except this Future Farmer.

A. B. Kennerly

ALMOST everyone thought it was an impossible goal last spring when C. L. Cook, Jr., decided to plant five acres of rice as his vo-ag enterprise. Rice production is a man-sized job, and besides, C. L. had neither land, rice acreage allotment, nor the $500 needed to raise the crop. Raising rice would test every faculty the 15-year-old Future Farmer from Port Lavaca, Texas, possessed.

"I wanted to become a rice grower," confided C. L. "I knew the odds were against me, but I believed I could be successful." Hard facts are that it takes more than a desire to succeed in raising rice. To begin with, C. L. does not live within the main rice-raising country. His home at Port Lavaca is at the western edge of the Gulf Coast rice belt. There are few rice growers in his county.

Next came the financial problem. C. L. knew that rice growers pay out from $100 to $120 an acre from planting until the grain is in the warehouse, and that the average rice farmer has $200,000 invested in land and machinery. Rice is under strict allotment, and getting the land is another big problem. Those fortunate enough to get allotments do not give them up easily. Add to these facts the need for machinery—big tractors costing from $7,500 to $10,000, plus combines, plows, and sprayers—and the vo-ag student faces an almost impossible task.

But when there's a young man who really wants to accomplish a task, it's surprising how many men are ready to help. "I'll help worthy young men any way I can," says A. L. Clark, a rice grower near Port Lavaca. "C. L. demonstrated that he has the initiative and ambition to get ahead. He can have five acres of my land on which to grow some rice."

With this plot of land promised, C. L. set out to obtain seed. He ordered the best possible seed available, Belle Patna from Texas A. & M.'s experiment station near Beaumont. To buy it, C. L. borrowed $150 from a bank in Port Lavaca.

Fertilizer aid appeared in the person of Archie Pittman, sales representative for a national fertilizer manufacturer. "We arranged for C. L. to put on demonstrations in the use of fertilizer on rice," Pittman explained. "We know that fertilizer pays off on rice, but we're still learning just what formulas pay off on certain types of soil. We hope to learn from C. L.'s demonstrations."

Spreading the fertilizer was accomplished by a friendly airplane agricultural concern, Cornett Flying Service, that included C. L.'s five acres in its flights over adjoining rice farmlands. Grateful C. L. explained, "Without assistance from people such as these, I could never have seen my rice project under way."

The rice enterprise is located 12 miles from C. L.'s home in Port Lavaca. He drives there twice a day in rice season to work the crop—once before school, and again after classes end. He spends a lot of time with Clark, a veteran rice farmer with 25 years in the Gulf Coast country. Clark acts as a sort of advisor on rice production. Know-how is extremely important in rice growing. A mistake such as applying weed control chemicals at the wrong time can be costly.

Advisor M. D. Shillings believes rice projects are good for those Future Farmers who can obtain the proper assistance for success. "If the student must borrow all of the money he needs to raise rice, a crop failure could be disastrous," he explains. "Yet for the Future Farmer who has determination like C. L., a big-time project like rice growing can be a profitable experience."

One reason C. L. is so enthusiastic about growing rice, Pittman believes, is the great future in this commodity. It is the only agricultural crop where growers have worked themselves out of a surplus hot spot. Back in 1956, the rice carry-over was nearly 35 million 100-pound bags. By the spring of 1961, a rice acreage allotment and product promotion, both here and abroad, had reduced it to less than 7 million bags. Now rice can flow through regular market channels at a fair price. As a direct result, every grower received a 10 percent increase in allotments, and C. L. was able to obtain his five-acre allotment.

C. L. is keeping his eye on new management practices from rice research. Scientists are predicting 40- to 45-barrel yields by double-cropping early maturing rice varieties like Belle Patna, an idea C. L. has started to use. Also being worked on are grasses for winter grazing that will permit him to grow cattle in his rice rotation. It's no wonder that C. L. is looking forward to the time when he will have an important place in the rice industry.

Last fall, C. L. harvested 18 barrels on his first crop and 13 barrels from his second, making a total of 31 barrels per acre. He was so enthused that he bought 11 acres this spring from a neighbor who quit farming, and has 16 acres of rice planted this summer. Working closely with a friend, R. L. Miller, C. L. exchanges his labor for Miller's equipment. Another fertilizer demonstration is in progress, and C. L. reports that each of his rice plots now receives a total plant food application of 60-40-0.

With a strong determination to grow rice—and succeed—C. L. Cook has set an example his county agent-father and advisor can point to with pride. "I'm hoping to increase some more," he testifies. ◆◆◆

In the past four years this extension phone has saved Gene Stephani over 1500 hours

WOULD YOU HIRE OUT FOR 5¢ AN HOUR?

You wouldn't—unless you're a philanthropist. Yet there are farmers all over the country who are unwittingly placing about that value on many hours of their time—time that could be saved by an extension phone.

Gene Stephani, by his own analysis, was one of them.

About six times in the course of a working day on his dairy farm near Black Creek, Wisc., Gene stopped what he was doing, walked to the house, took or made a phone call, and then hurried back to the job. Each of those calls was costing him 15 minutes—an hour and a half a day.

Finally he decided to try an extension phone—*for one month.*

That was four years ago. The phone is still on the wall in the barn. By Gene's calculation it has saved him over 1500 hours. And, for each hour of his time it saved, it has cost him under a nickel.

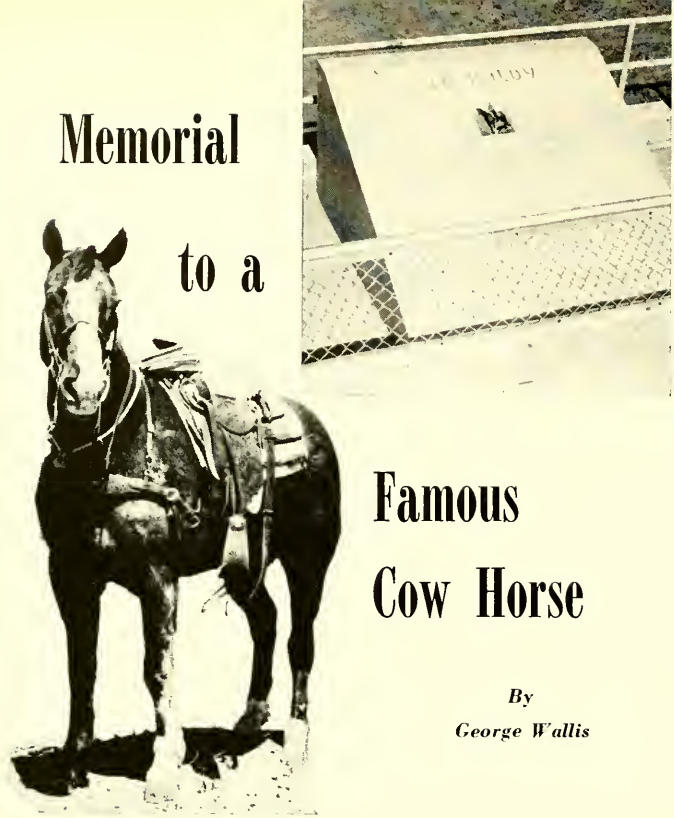
Today hired man-hours are the highest-priced thing a farmer buys—642% of parity. Even more valuable are the hours he can't hire—his own. Yet many farmers are squandering hours that they could save for mere pennies.

If you're one of them, we suggest you give your Telephone Business Office a call and tell them where to put your extension.

● *If you want an all-around communications system, Farm Interphone is the answer. It gives you on-the-farm communications between strategically located Interphone stations. You can also make or take regular outside calls from any of these telephones.*

BELL TELEPHONE SYSTEM

Memorial to a Famous Cow Horse



By George Wallis

CATTLEMEN gathered in Lea County, New Mexico, last September and erected a memorial over the grave of "Old Baldy," one of the most famous western horses. He had helped make three cowpokes world's champions of the rodeo arena and earned over $300,000 for the men who rode him.

The New Mexico county that Old Baldy helped make famous is on the great plateau of the Staked Plains, once the home of Comanche Indians and millions of buffalo. Today, with nearly 52,000 head of cattle, 8,830 producing oil wells, and over 30,000 acres under irrigation, Lea County is in New Mexico's wealthiest area.

Old Baldy was born April 6, 1932, at Telala, Oklahoma, and came to New Mexico early in his career. Raised on the John Dawson ranch, he was turned over to a famous bronc rider, Louis Brooks, to be broken for riding and working cattle when he was three years old. Brooks was as fine a horseman as ever forked a saddle. He was not only a good rider but won the world's championship in 1943 as an all-round cowboy.

A world's champion cowboy must be good in more than just one field, and Louis Brooks, the man who broke and trained Baldy, won his championship in competition in rodeos from Pendleton, Oregon, to Madison Square Garden in New York.

Ike Rude acquired this promising young cow horse in 1935, and gave him five more years of rugged experience in the rodeos of the United States and Canada. Baldy was just getting to be a top roping horse when Rude loaded him into a trailer at Burnwell, Nebraska, and headed for a rodeo at Winnipeg, Canada.

The hay in Baldy's trailer caught fire, and the horse was severely burned about his forelegs and head before being rescued by his owner. Rude and the veterinarian who treated Baldy thought the horse was ruined. Although scarred for life, Baldy was ready for roping again when the next rodeo season rolled around. Baldy soon became famous as a calf roper.

It takes lots of speed, accurate maneuvering, and a sudden stop to make a good roping horse, and Baldy had all of these.

Clyde Burke bought him in 1941 and three years later, with Baldy's help, became world's champion calf roper. Burke was killed in a rodeo accident in 1945. Baldy had become so famous, however, that Mrs. Burke made money letting other cowpokes ride him. The price was usually a share in the prize money.

Clyde Burke had received many good offers for Baldy, but he turned them down on the belief the horse could not be replaced. Troy Fort of Lovington, New Mexico, another good roper, had been watching Baldy and trying to buy him. When Mrs. Burke took Baldy to the Cheyenne Frontier Day Rodeo in Wyoming in 1946, Fort offered her $2,500 for the great roping horse. It was accepted. With Baldy's aid, Fort won the world's championship and $18,482 in prize money the first year he owned him.

With this prize money and $40,000 he borrowed, Fort bought a ranch in Lea County. Baldy soon paid for it and helped Fort to become world's champion calf roper again in 1949. Fort bought another ranch, and Baldy paid for that, too.

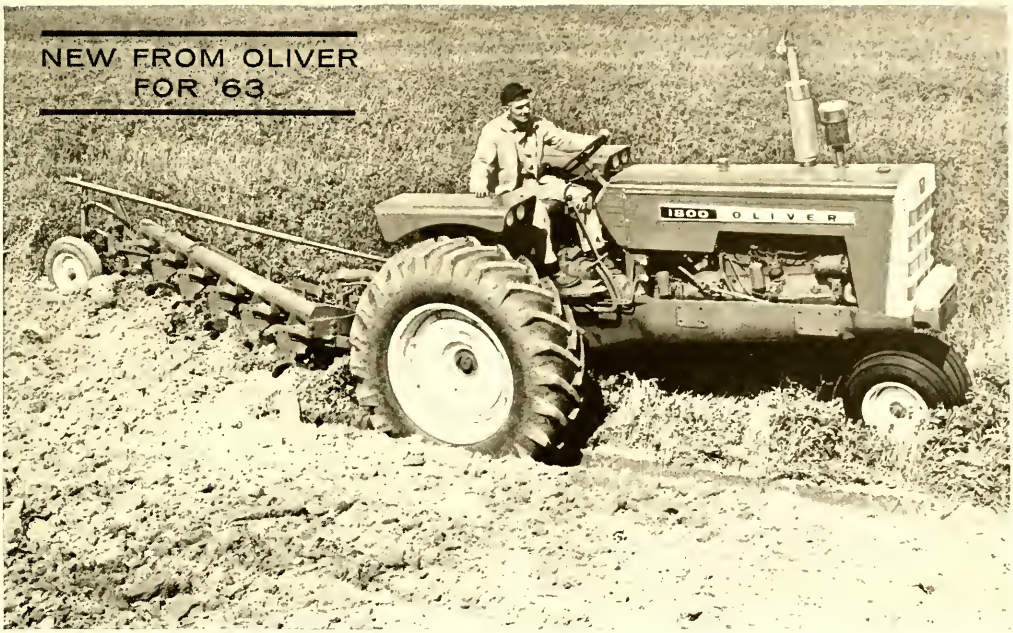
When Fort began to slow down, he rented Baldy out to other cowboys as Mrs. Burke had done. The horse earned more dividends than a good stack of bonds. Other cowpokes who paid money for the use of Baldy in rodeos all became well known in the rodeo world.

Jack Skipworth was using Baldy in a rodeo at Clovis, New Mexico, in 1949, when the horse suffered a heart attack. The fine old horse was now 17 years old and had spent 14 years in the hardest kind of rodeo competition. Troy Fort took him back to his ranch at Lovington to spend the balance of his days in peaceful retirement. Old Baldy enjoyed his hard-earned tranquility for 10 years. His death came in January, 1961.

The rancher made preparations to give Baldy an honorable burial on the grounds of the ranch he had helped to buy. He was digging the grave when neighboring cattlemen and rodeo fans suggested that the horse be buried on the grounds of the Jake McClure Arena in Lovington. They offered to erect a memorial to the horse that had helped to make three world's champions.

The suggestion was accepted, and today Old Baldy sleeps under a monument erected to his memory. On the stone is a weather-proof picture of the famous horse with his last owner in the saddle. A brief history of the great horse is inscribed on the stone for all horse lovers to read.

Thousands now come to the arena to watch younger horses trying to become famous, as Baldy did. So far, they have been unable to match the feats of Old Baldy, and he remains the champion calf-roping horse of all time. ◆◆◆



NOW: 83.5 PTO H.P.*
FOR THE 6-PLOW 1800

Already one of the most widely accepted tractors ever built, the Oliver 1800 now offers a powerful boost in performance for 1963!

The new increase in 6-cyl. horsepower (now 83.5* on the PTO) gives the 1800 tremendous pull power with reserve capacity—lets you plan on larger equipment, more cropland acreage. And, of utmost importance, the big 1800 has the ideal combination of massive weight, speed ratios and depth control to put this new horsepower to work.

You get built-in weight—evenly distributed front to rear—for superior traction. You get 12 speeds forward through optional Hydra-Power Drive, with shift on-the-go for up to 36% pull power increase—ideal for toughest conditions. You get an advanced 3-point draft control hitch with excellent weight transfer. And you get a new concept in torsional seating, control convenience and platform arrangement that spells the difference between comfort and fatigue every day you're in the field.

See your dealer this week! Oliver Corporation, Chicago 6, Illinois.

ALSO NEW: *Four-Wheel Drive* for both the 1800 and 1900, providing even greater traction over difficult ground conditions. Front drive disengages for transport. *New power increase* to 102 PTO H.P.* gives the 1900 a new level of performance.

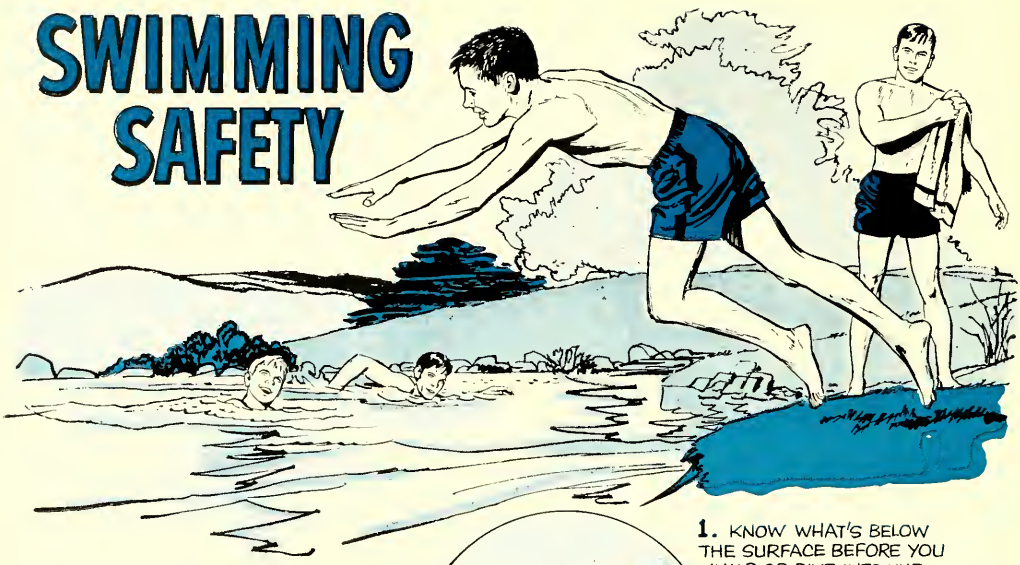
**Maximum corrected PTO H.P., manufacturer's estimate, gasoline model.*

OLIVER

OLIVER

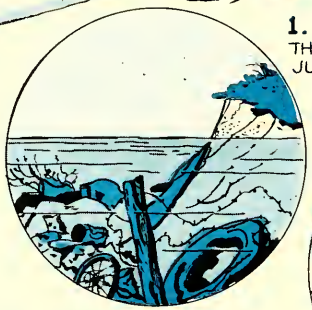
Look for this sign, new symbol of prompt, dependable service and genuine Oliver parts.

SWIMMING SAFETY

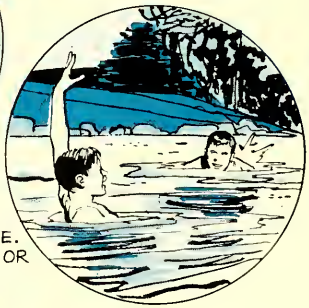


DON'T LET A SWIMMING ACCIDENT SPOIL THE FUN THIS SUMMER. STATISTICS SHOW THAT MOST WATER TRAGEDIES HAPPEN WITHIN A FEW FEET OF SAFETY.

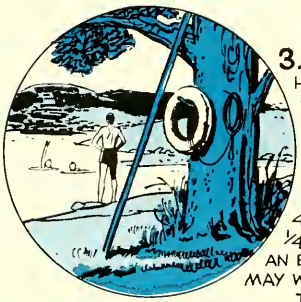
THESE SIMPLE SAFETY PRECAUTIONS MAY SEEM ELEMENTARY, BUT THEIR NEGLECT CAN TURN A DAY'S FUN INTO YEARS OF REMORSE.



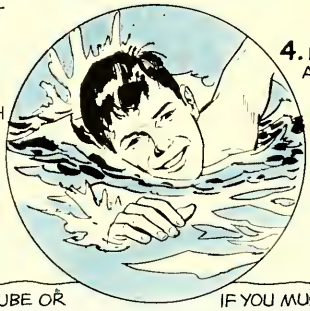
1. KNOW WHAT'S BELOW THE SURFACE BEFORE YOU JUMP OR DIVE INTO THE WATER.



2. NEVER SWIM ALONE. SWIM WITH A BUDDY OR WITH THE CROWD.



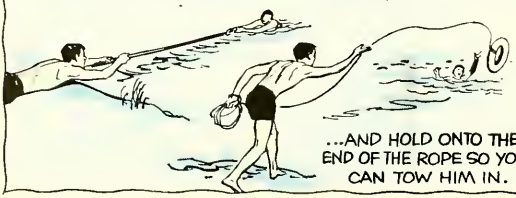
3. THE OLD SWIMMIN' HOLE WILL BE A LOT SAFER WITH A 12-FOOT POLE HANDY, AND AN INNER TUBE OR LIFE RING TO WHICH IS ATTACHED 40-FEET OF ¼-INCH LINE. IN AN EMERGENCY THESE MAY WELL AVERT A TRAGEDY.



4. KNOW YOUR SWIMMING ABILITY...DON'T SHOW OFF AND SWIM BEYOND A SAFE LIMIT. DON'T LEAP INTO THE WATER WHEN YOU'RE OVERHEATED OR OVER-TIRED. WAIT AT LEAST AN HOUR AFTER EATING BEFORE SWIMMING.

RESCUE RULES...

EXTEND A POLE, A BRANCH OR ANYTHING YOU CAN GET IN A HURRY TO THE VICTIM.



IF YOU THROW A TUBE OR LIFE RING—TOSS IT OVER AND BEYOND THE VICTIM...

...AND HOLD ONTO THE END OF THE ROPE SO YOU CAN TOW HIM IN.

IF YOU MUST GO INTO THE WATER TO MAKE THE RESCUE, REMOVE YOUR SHOES, CARRY A SHIRT OR TOWEL IN YOUR MOUTH AND FLIP IT TO THE VICTIM TO GRAB...THEN TOW HIM TO SHORE.

IF YOU HAVEN'T EITHER—APPROACH HIM FROM THE REAR AND TOW HIM BY HIS HAIR.

DON'T ATTEMPT A RESCUE BEYOND YOUR ABILITY. IF THERE'S NO BOAT HANDY—RUN FOR HELP!

A TRUE STORY OF FFA

by AL STENZEL

THE FFA CHAPTER AT FLATHEAD COUNTY HIGH SCHOOL, KALISPELL, MONTANA, HAS WON 19 GOLD AND 2 SILVER FFA FOUNDATION EMBLEM AWARDS IN THE LAST 21 YEARS FOR OUTSTANDING CHAPTER WORK.

THAT'S QUITE AN IMPRESSIVE RECORD. WHAT'S THE SECRET?

NO SECRET. WE'RE JUST LUCKY TO HAVE HAD A VO-AG TEACHER WITH IMAGINATION...

...AND DARING CONVICTIONS ABOUT FARMING!

YOU MEAN MR. HENRY E. ROBINSON?

THAT'S HIM!

HE'S EMPHASIZED THAT FARMING IS A BUSINESS AND SHOULD BE RUN AS A BUSINESS.

ALTHOUGH MANY OF US WILL EARN UP TO $8,000 BY OUR SENIOR YEAR HERE, WE'LL GRADUATE IN DEBT TO THE BANK.

BECAUSE TODAY, CREDIT IS THE BEGINNING FARMER'S MOST IMPORTANT SINGLE TOOL.

THE FFA MEMBERS HAVE NO DIFFICULTY GETTING A LOAN. THE LOCAL BANKER SAYS:

ON THE STRENGTH OF THEIR DETAILED NOTEBOOKS OF COSTS AND NEEDS, MY BANK HAS LOANED THEM $200,000 IN THE PAST 5 YEARS—AND NEVER LOST A PENNY!

SOME YEARS AGO THE SMALL WHEAT FARMS IN FLATHEAD VALLEY WERE CAUGHT IN A PRICE-COST SQUEEZE. UNDER MR. ROBINSON'S DIRECTION THE FLATHEAD FFA CHAPTER WENT TO WORK...

THEY THINK THE LAND IS TOO POOR TO GROW OTHER CROPS. LET'S SHOW THEM DIFFERENTLY.

THEY LEASED 96 ACRES OF THE POOREST LAND THEY COULD FIND ...ERODED AND WORN OUT, THAT HADN'T PAID ITS WAY IN YEARS.

THE SCHOOL SHOULD LEAD THE COMMUNITY, NOT BE LED BY IT.

WE'LL GROW SOMETHING IN THIS SAND OR BUST TRYING!

THE BOYS RAN SOIL TESTS...

EXCESSIVE ALKALINITY—THAT'S THE VILLAIN!

MANURE WOULD CORRECT THAT, BUT WE COULDN'T GET ENOUGH!

LET'S USE SAWDUST!

SAWDUST?

TO FINANCE THE WORK THE FFA CHAPTER INCORPORATED AND EACH MEMBER BOUGHT $10 WORTH OF STOCK. THEN, NOTEBOOKS IN HAND, THEY BORROWED $5,000 FOR MACHINERY AND FERTILIZER.

FOR WEEKS THEY WORKED SAWDUST INTO THE LAND, INSTALLED A COMPLETE OVERHEAD SPRINKLER SYSTEM, AND ALMOST FROM THE BEGINNING MADE THE OLD ALKALINE FLATS BLOSSOM.

WHAT WAS AT FIRST CALLED THE "FFA FOLLY" GROSSED AT LEAST $4,500 ANNUALLY FROM THESE 96 ACRES SINCE THE FIRST YEAR!

FOLLOWING OUR METHODS FARMERS IN THE VALLEY NOW NET UP TO $500 AN ACRE ON LAND THAT USED TO NET 10 DOLLARS.

PROFITS FROM OUR CHAPTER'S RE-BUILT LAND GO INTO A LIVESTOCK POOL TO HELP GET US STARTED ON OUR OWN FARMS AFTER GRADUATION.

AND WE'RE GETTING A SOUND EDUCATION IN THE MOST MODERN FARMING PRACTICES IN ONE OF THE BEST-EQUIPPED VO-AG SCHOOLS.

NO WONDER YOUR CHAPTER HAS WON THE GOLD EMBLEM AWARD SO CONSISTENTLY.

THE STORY OF FARMING

No. 5 The New World.

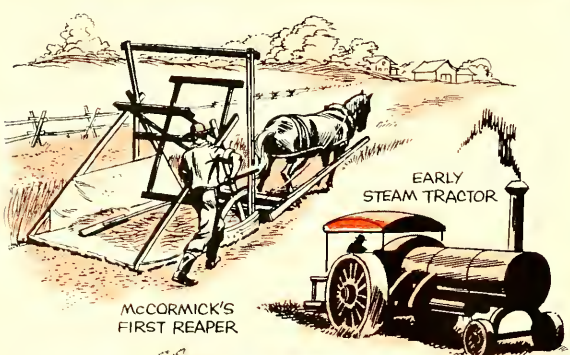
THE DISCOVERY OF AMERICA OPENED UP A VAST NEW LAND FOR EXPLOITATION BY ENGLAND, FRANCE AND SPAIN...FOR TRADE WITH THE NATIVES, FOR FISH, FURS AND GOLD. NO PLANS WERE MADE TO FARM THIS VIRGIN WILDERNESS.

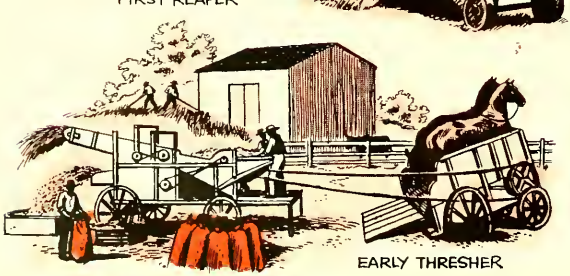
BUT BY THE 17th CENTURY, THE EMIGRANTS TO THE NEW WORLD WERE FORCED TO TURN TO FARMING IN ORDER TO LIVE, AND FARMING CONTINUED TO BE THE MAINSTAY OF COLONIAL LIFE THEREAFTER.

THE WAVES OF IMMIGRANTS THAT BEGAN POURING INTO THE COLONIES CAME FROM MANY EUROPEAN COUNTRIES BRINGING WITH THEM A COSMOPOLITAN MIXTURE OF TOOLS, SEEDS, LIVESTOCK, PLANTS AND FARM PRACTICES THAT VARIED WIDELY.

THEY FOUND THE INDIANS HAD DEVELOPED A DEGREE OF FARMING ALMOST ON A PAR WITH THEIRS; SOME FAR IN ADVANCE. THE INDIANS' COMMUNAL IRRIGATION PRACTICES IN THE SEMIARID SOUTHWEST, FOR EXAMPLE, POINTED THE WAY CENTURIES LATER FOR RECLAMATION OF DRY LANDS.

HERE, TOO, EUROPEANS FOUND THE INDIANS GROWING FOODS UNKNOWN TO THE OLD WORLD—MAIZE, SQUASH, BEANS, POTATOES, TOMATOES, PEPPERS, AND SUCH THINGS AS TOBACCO, PEANUTS, CHOCOLATE, MAPLE SUGAR, ETC.





UNTIL THE 19th CENTURY AMERICAN FARM TOOLS WERE LITTLE DIFFERENT THAN THOSE USED IN ANCIENT ROME, AND THEIR USE OF LAND WAS SHOCKING...NEW LAND WAS SO EASY TO GET WHY WORRY ABOUT ITS FUTURE FERTILITY!

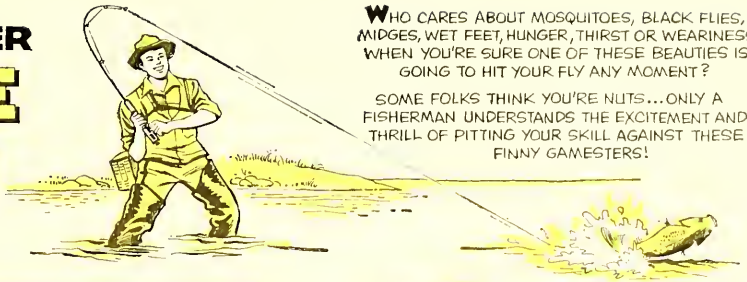
THEN, INCREASING POPULATION AND RISING LAND PRICES FORCED FARMERS TO IMPROVE THEIR WASTEFUL METHODS.

IN 1831, CYRUS McCORMICK INVENTED THE REAPER, FOLLOWED IN 1834 BY JOHN AND HIRAM PITTS' COMBINED THRESHER AND FANNER.

IN THE EARLY 1900'S TRACTORS WERE DEVELOPED AND THE ERA OF MODERN FARMING CAME INTO BEING.

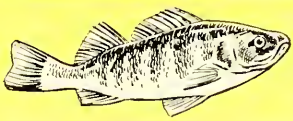
TODAY A NEW BREED OF FARMER IS PERFORMING MIRACLES OF FOOD AND FIBER PRODUCTION. SCIENCE AND TECHNOLOGY HAVE GIVEN HIM THE TOOLS AND KNOW-HOW. MORE AND MORE FARMS ARE BEING MECHANIZED, MORE AND MORE FFA CHAPTERS ARE TURNING OUT SCIENTIFIC FARMERS. OUR FARM PROBLEM TODAY IS DISTRIBUTION RATHER THAN PRODUCTION.

FRESH WATER GAME FISH

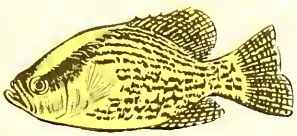


WHO CARES ABOUT MOSQUITOES, BLACK FLIES, MIDGES, WET FEET, HUNGER, THIRST OR WEARINESS WHEN YOU'RE SURE ONE OF THESE BEAUTIES IS GOING TO HIT YOUR FLY ANY MOMENT?

SOME FOLKS THINK YOU'RE NUTS... ONLY A FISHERMAN UNDERSTANDS THE EXCITEMENT AND THRILL OF PITTING YOUR SKILL AGAINST THESE FINNY GAMESTERS!

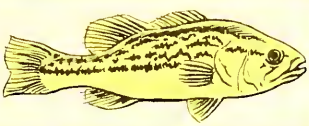


YELLOW PERCH KNOWN ALSO AS STRIPED, RED, RACCOON PERCH. PREFERS SLOW RIVERS, STREAMS, PONDS. WEIGHT UP TO 4 LBS.

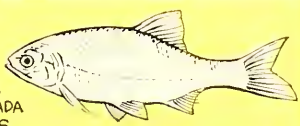


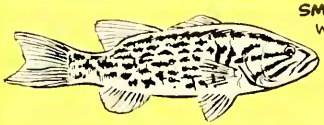
BLACK CRAPPIE OR CALICO, TINMOUTH, STRAWBERRY BASS, PAPERMOUTH. SIMILAR TO WHITE CRAPPIE, BUT HAS EXTRA SPINES ON DORSAL FIN. WEIGHT TO 4 LBS.

LARGEMOUTH BASS FOUND IN MOST STATES IN SLOW STREAMS AND LAKES. WEIGHT, UP TO 10 LBS. BUT SOME AS LARGE AS 22 LBS.



BREAM ALSO CALLED AMERICAN ROACH, DACE, CHUB, GUDGEON AND GOLDEN SHINER. WEIGHT, ABOUT 1½ LBS. LENGTH ONE FOOT. CANADA TO FLORIDA AND TEXAS.

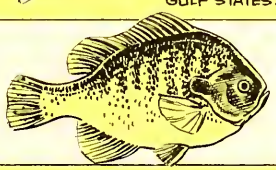




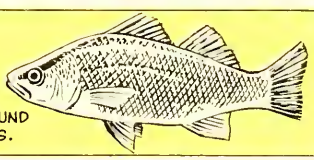
SMALLMOUTH BASS WEIGHT, UP TO 14 LBS., RECORD LENGTH, 28 INCHES. WIDELY DISTRIBUTED EXCEPT IN GULF STATES.

CATFISH OR FLATHEAD, BULLHEAD, CHANNEL, BLUE AND WHITE CATS. SOME REACH 150 LBS., AND UP TO 6 FT. IN LENGTH. FOUND ALL OVER THE NATION.

BLUEGILL OR SUNNY, WEIGHT UP TO 1½ LBS., LENGTH TO 14 IN. FINE PAN FISH. IN LAKES, PONDS AND STREAMS OF EASTERN HALF OF U.S.



WHITE PERCH (ACTUALLY A BASS) WEIGHT, TO 3 LBS. IS DARKER IN LANDLOCKED LAKES THAN IN STREAMS. FOUND IN EASTERN STATES.

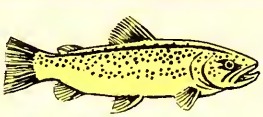


MUSKELLUNGE—PIKE FAMILY. A VICIOUS FIGHTER. FOUND IN COLD, CLEAR LAKES AND RIVERS. RECORD SIZE: 62½ LBS., 56½ INCHES.

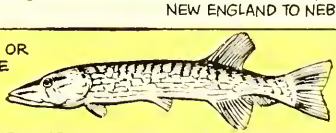
NORTHERN PIKE OR JACKFISH

EXCITING GAME FISH. WEIGHT, TO 46 LBS., LENGTH TO 4½ FT. CANADA, ALASKA, NEW ENGLAND TO NEBRASKA.

BROWN TROUT OR LOCH LEVEN. IMPORTED FROM EUROPE TO RESTOCK EASTERN STREAMS. 5–10 LBS. IN WEIGHT... RECORD OVER 40 LBS.



PICKEREL OR GREEN PIKE



WEIGHT UP TO 10 LBS. LENGTH—3-4 FT. FOUND IN WEEDY PONDS, STREAMS AND BACKWATERS OF SOUTHERN RIVERS.

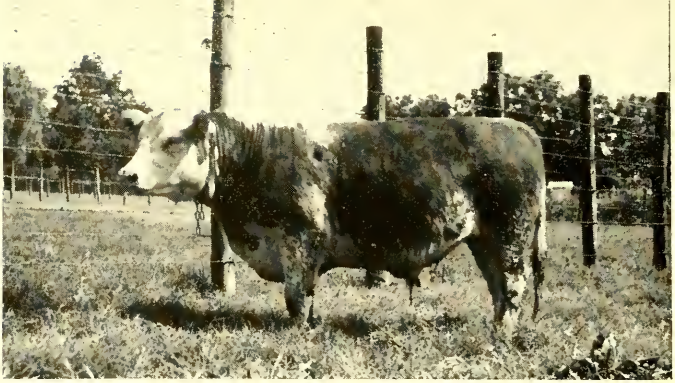
CUTTHROAT TROUT HAS A BLOOD-RED SLASH UNDER ITS JAW. RECORD WEIGHT—41 LBS. LENGTH 39 IN. FROM CALIFORNIA TO ALASKA. GOOD FLY-FISHING GAMESTER.

BROOK TROUT ALSO EASTERN, SPECKLED, RED, SQUARETAIL... ACTUALLY A CHAR. FOUND IN CLEAR LAKES AND STREAMS. CANADA TO GEORGIA. RECORD, 14½ LBS.

ATLANTIC SALMON THE TROPHY FISH OF FLY CASTERS. A BEAUTY AND A BATTLER. RECORD, 79 LBS., 2 OZ.

RAINBOW TROUT THE SPORT-FISHERMEN'S IDEAL GAME FISH. RECORD: 37 LBS., 40½ INCHES

FACTS and FANCIES about



This single-cross steer is the result of mating a Shorthorn bull and a Hereford cow. The cross ranked highest on live slaughter grade as a yearling.

By
Stewart Fowler

CROSSBRED BEEF

Crossbreeding is not a "cure-all," but a planned program can net you hybrid vigor with faster gains in the feedlot.

TO CROSS or not to cross my beef animals? How should you answer this puzzling question? Unfortunately, fact and fancy clash too often and confuse this practice.

To make the right decision, you need to know what crossbreeding really is. And, you'll want to know what it can and can't do for you.

Crossbreeding is defined as "the mating of purebred animals from different breeds." For the average beef producer, however, crossbreeding includes planned, systematic mating of purebred bulls to females from one of three classes: (1) Purebred cows of another breed, (2) High-grade cows of another breed, or (3) Crossbred cows produced by crossing two or more breeds.

The key in crossbreeding is planned mating using purebred bulls. This will help lead to successful crossbreeding.

If you use just any breed of bull at breeding time, you aren't crossbreeding—you are "mixing" breeds. This hit-or-miss planning yields many-colored, generally confused mongrels! You should instead select breeds best suited to your mating plan; then cross them according to a plan.

Purebred performance-tested bulls are the starting point for success in any cattle program. Crossbreeding is no exception. Never use a crossbred or inferior grade bull. Top purebred bulls stabilize crossbreeding results.

But, you ask, why crossbreed anyway? Some cattlemen crossbreed to combine good qualities of two breeds, as with the Brahman and some British breeds in the Gulf States. Most other cattlemen, however, crossbreed to increase overall vigor. This is called "hybrid vigor," and may appear as improved fertility, greater livability, and faster gains with better mothering.

Research shows that hybrid vigor gives a 2 to 8 percent increase over the parents for these dollar-making traits. These results aren't colossal, but the fact is that any method capable of boosting beef production up to 8 percent is worth considering, especially in view of current high production costs.

How does this boost in performance occur? As each breed develops, it becomes "pure" in its gene pairs for some dominant favorable factors, as well as for some unfavorable recessive genes. Fortunately, most desirable traits are stimulated by the dominant genes. Thus, a Hereford bull may have genes aa, BB, cc, and DD (good dominant genes represented by capital letters and bad recessive genes by small letters). A Brahman cow may have genes AA, bb, CC, and dd. Calves from this cross would receive one gene from the bull, and one from the cow. So, the crossbred calf would carry genes Aa, Bb, Cc, and Dd. With one dominant gene in each pair, the calf would be more vigorous than the parents, since the dominant genes cover up the recessive bad genes.

The greater the genetic difference between the parents, the greater will be the hybrid vigor of the crossbred offspring. This is due to more chance for unlike genes to "pair off" where parents inherited their genes from widely different sources. This is why the Brahman from India and the French Charolais cross more effectively with the British breeds (Shorthorn, Hereford, and Angus) than the British breeds cross among themselves. This also tells why the choice of breeds for crossing is important.

What is the best beef cross? When cattlemen discuss crossbreeding, this question nearly always pops up. No wonder, because it is aimed at getting the right combination of genes so that the cattle will truly have "gold in their genes."

To help answer the question of what is the right cross, scientists at Louisiana State University started crossing bulls of six breeds (Angus, Brahman, Brangus, Charolais, Hereford, and Shorthorn) with cows of four breeds (Angus, Brahman, Brangus, and Hereford).

Let's look at the result. The following comparisons show top crosses in different traits. The breed of the bull is listed first; and the breed of the cow, second. The best cross in each category is listed first.

Weaning Weight: (1) Charolais-Brahman, (2) Charolais-Brangus, (3) Hereford-Brangus, (4) Hereford-Brahman.

Feedlot Gains: (1) Brahman-Hereford, (2) Charolais-Hereford, (3) Shorthorn-Hereford, (4) Brahman-Angus.

Weight Per Day of Age: (1) Brahman-Angus, (2) Brahman-Hereford, (3) Charolais-Hereford, (4) Hereford-Brahman.

Slaughter Calf Grade at Weaning: (1) Hereford-Brangus, (2) Hereford-Brahman, (3) Shorthorn-Brahman.

Fed Cattle Slaughter Grade (168-day feed test): (1) Shorthorn-Hereford, (2) Brahman-Angus, (3) Shorthorn-Brangus, (4) Shorthorn-Brahman.

From these results, it's obvious that certain breeds and

(Continued on Page 56)

NEWEST STAIRWAY TO HIGHER CORN PROFITS

THE TRIO OF HIGH PROFIT PRACTICES

Farmers everywhere are using it to produce 20 to 50 percent higher yields.

Take your present corn yield average; set a new higher yield goal, then—

1. Start with a High Capacity FUNK'S* G-HYBRID
2. Plant it THICKER
3. Apply extra fertilizer to FEED THE EXTRA PLANTS

FUNK'S G HYBRID

THE PRODUCERS OF FUNK'S G-HYBRIDS

* Funk's G-Hybrid is the registered trademark of Funk Bros. Seed Co., Bloomington, Illinois. ®

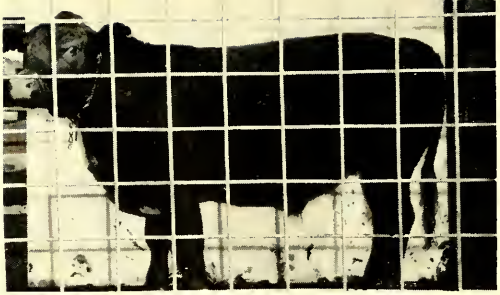
Crossbred Beef *(continued)*

their crosses are noted for particular traits. Thus, study them and adapt the cross that is best suited to your environmental conditions and market outlets.

Remember also that there's as much benefit from keeping crossbred cows for breeding as there is in making an original cross. Calves are dependent on the cow for about 433 days (283 days before and 150 days after birth). Thus, anything that improves a cow's vigor should benefit her calves. But calves do not benefit in any such manner from the hybrid vigor of a crossbred bull. So use only good purebred bulls to stabilize your crossbreeding program.

Some extra hybrid vigor will result from the use of purebred bulls of a third breed on your crossbred cows. From that point, you might follow with a rotation of sires of the three breeds. A systematic rotation of this three-breed crossing soon settles down to produce crossbreds having four-sevenths of the hereditary material of their immediate sire, two-sevenths from the breed of their maternal grandsire, and the remaining one-seventh from the other breed used.

However, many cattlemen look at the extra time and expense involved in crossbreeding and feel that the benefits won't pay. If this is bothering you, consider mating your cows artificially to bulls from a reputable breeding association. This will quickly eliminate those problems.



Three-fourths Shorthorn and one-fourth Brahman, this 14-month-old steer dressed high in grade at slaughtering.

Crossbreeding isn't a "cure-all" for eliminating all herd problems, and it won't substitute for proper feeding, management, and sanitation. But, it is a sound breeding tool that can put more profit in your pocket if it's properly used with other good management practices. ◆◆◆

A NEW CROP FOR PAUL

by
Ted Mauntz

PAUL Massengale's vo-ag project growing near Buckeye, Arizona, is certainly unique, for Paul is the only Future Farmer we know that is growing safflower as his vo-ag enterprise.

This ancient oilseed crop has been relatively unknown in the United States until the past three years. Even as late as 1951, the total U. S. crop was only 15,000 acres. Then a few years ago, scientists found that safflower oil is the most highly poly-unsaturated of all vegetable oils; and a December, 1960, American Heart Association report sent diet and food faddists in a mad rush for safflower cooking oils, mayonnaise, margarine, ice cream, and even bread.

All this safflower talk led 16-year-old Paul to plan his own crop project in the fall of 1961. Then he was beginning his sophomore year at Buckeye Union High School.

An uncle let Paul use an irregularly shaped plot of land, about two acres total, that bordered U. S. Highway 80, some seven miles east of the Buckeye community. Paul planted, irrigated, and cultivated the two acres of safflower, doing the tractor work himself and helping his father in slack times to do custom work in the area.

All of this central Arizona land where Buckeye Valley is located is desert, with only that land under irrigation being productive. But it is in this Buckeye area that farmers like Paul harvested 25,000 acres of safflower grain just last season. The 1962 crop put an added 3 million dollars into the pockets of Buckeye Valley farmers, and the local businessmen sponsored the world's first Safflower Festival last September.

Paul harvested 3,850 pounds of safflower seed from his first-year project, realizing a profit of $244. He told us that he learned a lot from raising this new crop, and this year's yield will be even higher. As you read this story, Paul is readying his machinery for the 1963 harvest.

Roy Clark, Paul's advisor, points out the many problems that the Future Farmer faced in his project, since it involved a comparatively new crop whose culture was not widely known. One of the problems was weed control. Although safflower is a weed itself (a member of the thistle family) it does not compete favorably with weeds.

However, it does use water favorably and apparently has good tolerance for alkali salts found in the soil. The latter are a major problem in the Buckeye area since the valley lies in the Gila River bottoms, a dry bed wash since the Salt River dams were built some years back.

The irrigation ditch bordering Paul's safflower plot is not concrete-lined, and as a result, he had to shape it each time he used water. But patience paid off for the Arizona Future Farmer, and now he is even more prepared to continue raising, cultivating, and combining the unique crop.

The Buckeye Valley now calls itself the "Safflower Center of the World." Last fall at the first safflower festival, localites selected a Safflower Queen, and this new crop is reshaping the community. But right in the midst of the activity, as with Future Farmers across the country, is Paul Massengale.

Widening farm profit margins

As you progress in this business of farming, you'll spend much of your life meeting the ever-present challenge of increasing your income.

And as a farmer-businessman, you'll realize that the solution must come primarily from breakthroughs in two vital areas: in higher and better quality yields, coupled with more efficient, lower-cost operation.

The first is largely in the hands of agricultural scientists and researchers. The second is one of the major aims of J. I. Case Company.

Above is an example of cost-cutting Case farm tools. This single hay harvesting machine does, in one pass, what it formerly took a mower, a hay conditioner and a rake to do.

This Case windrower eliminates the need for two men—and their wages. It saves up to 3 miles of field travel per acre. It harvests more and better quality hay that often commands a premium price.

Reliable field data based on this machine's operation, place the *extra* net profit on just 50 acres of alfalfa cut twice, at $317 annually.

Case equipment like this, and to come, will make increased farm yields more profitable by helping reduce farming costs. You'd find some of these efficient new farming machines now on display at your Case dealers. Why not pay him a visit?

Take a look at the NEW **CASE**®

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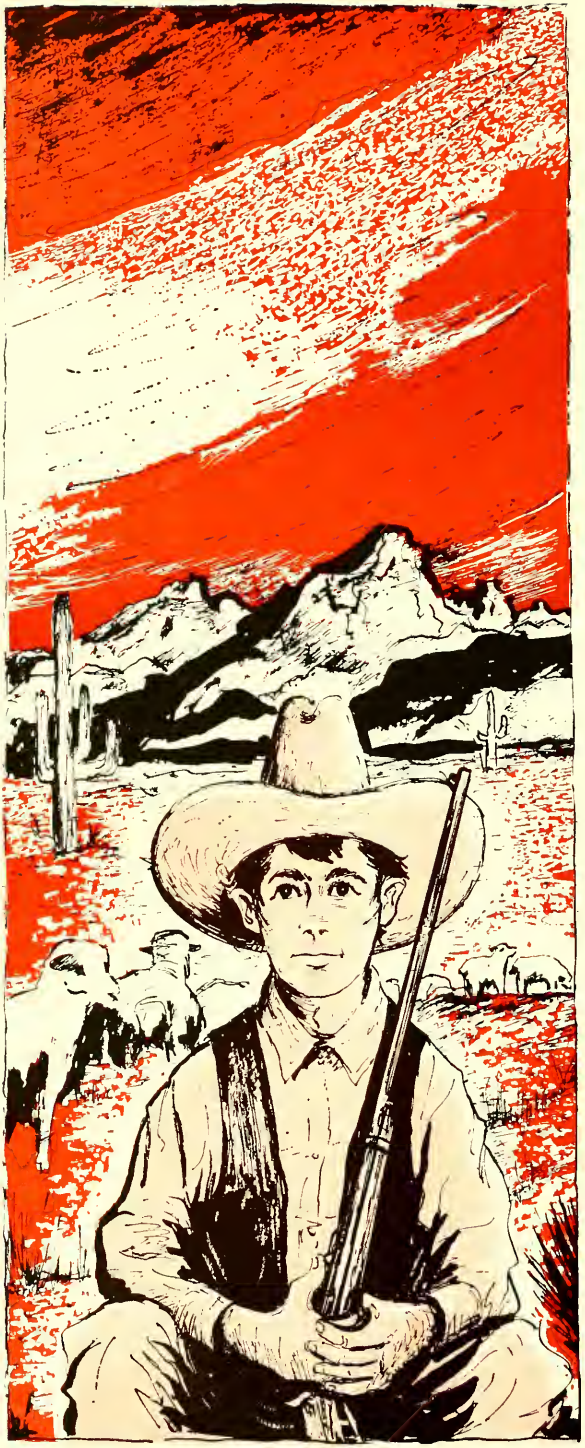
SEE YOUR CASE DEALER FOR QUALITY GOLD SEAL USED EQUIPMENT



There's Always A Valley

Fiction by

Grover Brinkman

JOHNNY CANNON sat on an embankment above the spring, black eyes slit as he stared at the heat waves shimmering over the Callao Sinks. He looked tired, older than his 15 years. Perhaps it was the ancient rifle across his knees that added stature to his slim frame. Just now he watched a dust cloud, far out on the parched range. He wondered if it meant trouble.

The land, as far as he could see, was bone-dry, parched, crying for a rain that did not come. Below his perch, surrounded by an Indian fence of closely knitted chaparral, was the small pond that in normal seasons was always full of the spring water that trickled from the cliff. But today the pond was nearly dry.

Johnny wore a black sombrero which, in comparison to his thin, wind-whipped face, seemed too large. His oval, high-cheekboned features attested to his Navajo ancestry, but only faintly. Too, there was a proud, harsh determination in the cut of his chin that gave him a certain rugged dignity.

"The dust could be sheep," Johnny told the emptiness. "Or it could be Mr. Henderson and Miguel."

It had been a lonely vigil guarding the spring and that precious water inside the fence.

"Just sit tight, Johnny," Mr. Henderson had instructed. "If we get the ewes into Wachita, we can save them."

"It is a long, dry trail," Johnny said. "Many of the old sheep will die."

"I know. But we'll lose even more if we keep them here any longer. We've never had a drought like this, Johnny!"

"That is what my father says . . ."

"Your father has been a sheepherder for a long time, Johnny. His judgment should be respected."

"He is a very good herder, Mr. Henderson."

(Continued on Page 60)

*Based on comparison with new tractor tires other than special purpose tires.

Super-Torque, Tufsyn—T.M.'s The Goodyear Tire & Rubber Company, Akron, Ohio

Only the Goodyear Super-Torque tire has "Angle-Braced" lugs to outpull all others in the field—outwear all others on the road

Super-Torque lugs are like corrugated steel—"Angle-Braced" to give you greater strength . . . more length . . . more pulling surfaces . . . more pulling power—all within the same space required for conventional lugs!

And, Super-Torque lugs are far wider . . . up to 34% deeper than standard lugs! Further, they're made with Tufsyn—toughest synthetic rubber in Goodyear's history—to not only outpull, but outwear all others!

Results: far better traction . . . less fuel consumption . . . longer tread life . . . and as much as 28% lower tire operating costs!

You're already paying for Super-Torque tractor tires anyway. Why not use them? For details, see your Goodyear Dealer or Goodyear Service Store!

GOODYEAR

There's Always a Valley

(Continued from Page 58)

Henderson's eyes swung back to the shimmering desert.

"To the left of the Callao Sinks is a small valley, Johnny. It's protected, and there's still some grass there because Miguel saw it only last week. But Barry Moss has the grazing rights to the valley this season, and he's using every inch of it for his 3-Bar spread. If we had that valley, we could laugh at the drought . . ."

But they didn't have it. And there was no way of getting it, as Johnny well knew. So Mr. Henderson would take the older sheep to Wachita to sell them, then come back for the lambs—if the water in the pond lasted.

"We should return not later than Wednesday night," Henderson had instructed. "Guard that water. Keep the gate closed. We can't start the lambs to the railroad unless we first let them drink their fill . . ."

"I shall guard the pond, day and night, until you return," Johnny had assured him.

Mr. Henderson's hard hand was on his shoulder, his lips smiling. "You're a good boy, Johnny, a credit to your people."

That had been two days ago. Johnny had remained at the spring, eyes sharp on the desert. But nothing living came into view—not even a coyote. He had watched each tiny cloud that floated through the sky, hoping it would be the forerunner of rain. But the merciless sun kept beating down. The spring was just a trickle from the niche in the cobalt wall.

Before dusk each night, he rounded up the lambs, let them drink sparingly, then herded them out of the gate. They were so thirsty he had literally to push them out of the corral. And even then, they milled about the fence, bleating for water.

"Why doesn't God send the rain?" Johnny asked the starlit sky as he ate his simple meal. "Why do sheep have to die because there is no water?"

There must be some reason, but he was too tired to think further of the problem. Back on the reservation before he started working for Mr. Henderson, Johnny remembered his mother's words as she told him the legends of his people. This was the seventh year of the yellow moon; it meant a year of trouble. The Navajos called it "Woz-c'ind," the time when young eagles cry. Now the lambs were crying for water. They were the young eagles. He was a young eagle, too. It was all symbolic of the hard, bleak days in a harsh, dry land.

Johnny shaded his eyes with his hand now and shifted his position on the rock crag, watching the growing dust cloud. Suddenly he was aware of one thing: It was not a freak windstorm that often whipped up dust into a high circular column as it raced across the desert. This dust cloud had now evolved into men on horses. First he thought it was a single rider, but now he saw there were more.

Johnny climbed down from the rock, circled the corral, and checked the lock on the gate. It was a good lock. He was positive that no one could get to the pond.

Mr. Henderson had ordered him to guard the water. It meant life or death to the sheep. He had given him the rifle.

"But does he expect me to shoot someone—if they try to break the lock?" Johnny mumbled. He shrugged his shoulders, lost in thought. It was a big question, and it suddenly loomed high in his thoughts.

Watching the dust cloud, Johnny saw a single rider break from the rest and spur his horse forward. He had seen the line shack and the corral, no doubt, and intended to check.

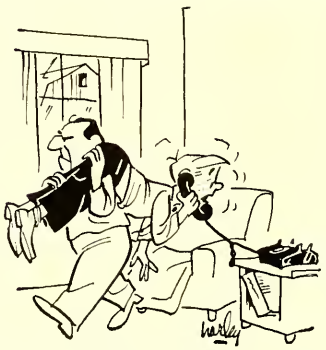
As the rider came closer, Johnny saw he was a boy, possibly a year or two older than himself. He rode a gruya-colored horse, quite spirited, and he too wore a wide sombrero. Then Johnny saw something. The boy wore a gun strapped to his waist. Johnny held his own rifle a bit tighter.

The boy reined up, only a few feet away from the stick fence, sat his horse there. Johnny saw the gleam of satisfaction build in his eyes at the sight of the pond. Then his eyes swung upward, where Johnny stood on the outcropping near the cabin, rifle in the crook of his arm.

"Hi, fellow!"

"Howdy!" Johnny said.

"Those lambs over there belong to you?" the boy asked.



"Gotta go now, Phil. I think Dad wants me to do my chores."

"They belong to Mr. Henderson, my boss."

"You're lucky, kid. You got water. My, that pond looks good!"

Johnny kept his silence, eyes sharp on the boy astride the gruya.

"We could use some of that water in your pond," the boy said, spurring his horse closer.

Johnny shifted his position on the outcropping. "The pond is nothing but a stagnant pool. It is all the water we have. It is for Mr. Henderson's sheep."

"I never did like sheep!"

Again Johnny kept his silence.

The boy's face broke into a grin. But somehow Johnny knew it was not a friendly grin. "Now what would you do," the boy challenged, "if I shot the lock off your gate, opening the way to the pond?"

Johnny's thin face sobered; his eyes narrowed. "I would try to stop you!"

"You would?" The boy jerked his head toward Johnny's ancient gun. "You mean that old gun can actually shoot?"

"It is a very good gun," Johnny said calmly. "I told Mr. Henderson I would guard the spring. I intend doing just that."

The boy's face changed, hardened. "Well, I'd say you got a big job, fellow! But you're the boss. Guess I'll ride back and tell Mr. Moss we can't have a drink . . ."

"You do that," Johnny said, unsmiling.

He saw the boy swing the gruya and go galloping off. Johnny realized his hands were trembling. He set the rifle against the rock, wiped his brow. His eyes turned toward the heavens, wishing for the impossible. But there wasn't a cloud in sight. He swung toward the Callao Sinks, hoping that he might see Mr. Henderson and Miguel coming back. But that, too, was wishful thinking.

The trouble built in Johnny's eyes. He knew that a big problem had suddenly been dumped into his lap. He was a mere boy, guarding a spring. Soon he would meet not only another armed boy but other men who wanted that spring very badly. What did you do in a situation like that? Did you remain firm, and if the gate were broken down, shoot the man or men who were trying to get the precious water? Did Mr. Henderson want him to do that—shoot a human being?

Johnny looked again at the dust cloud. The boy had rejoined his companions. They were talking, gesturing. He saw another man join the boy and come forward. Back of them, half concealed by the dust, there were cattle, herded by other riders.

(Continued on Page 62)

Marlin 57

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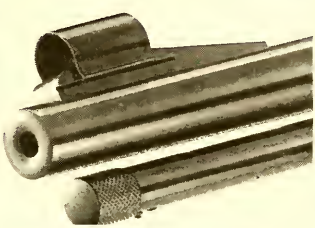

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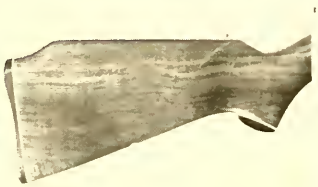

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There's Always a Valley

(Continued from Page 60)

He was one boy—against determined men. What did you do? In the Bible, David killed a giant with a slingshot. But this was different. He had promised to guard the pond. Their own sheep needed every drop of the precious water.

He realized that he didn't have long to weigh his decision. The boy on the gruya, with another rider at his side, skidded his horse to a stop in front of the corral gate. Johnny stood very straight on the outcropping, his rifle clutched tightly.

He saw a familiar face now. The rider who had joined the boy was Mr. Moss, who owned the grazing rights in the hidden valley.

"Hello, Johnny!" Mr. Moss said. He was smiling, and it seemed a very friendly smile. But his face had a granite hardness about it, too.

"Hello, Mr. Moss!"

The rancher pulled his horse closer to the outcropping. "Johnny, my cows are dying for water. We need your pond . . ."

Johnny was long in answering. "Mr. Moss, our lambs need the pond just as bad. Mr. Henderson took the older flock to Wachita, hoping to save them. As soon as he comes back, we'll let the lambs drain the pond, then start them toward the railroad, too . . ."

"You mean I can't have any water?"

"I am sorry. But that is the way it is."

The boy on the gruya edged nearer. His eyes were growing more hostile by the moment. But the rancher motioned him back. "I'll handle this, kid!"

His eyes searched Johnny's face. "Henderson gave you a big job . . ."

"I know that, Mr. Moss."

"Do you think a lone boy can stop my herd, Johnny?"

"I promised Mr. Henderson I would guard the pond," Johnny said slowly. "I feel I must keep that promise . . ."

"What if I step down and unlatch the gate?"

Johnny felt his hands trembling. His lips were tight. But his voice came firmly: "Don't make me shoot you, Mr. Moss!"

The rancher laughed, but it wasn't a mirthful laugh. "You wouldn't do that, Johnny. We're friends . . ."

"Please, Mr. Moss . . ."

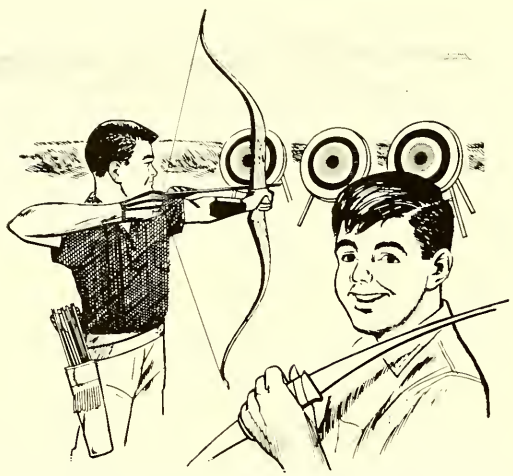
The rancher swung down from his horse, approached the gate. Johnny's hands were shaking more than ever now, but he raised the ancient rifle, aimed quickly, and fired a warning shot.

The bullet chipped wood, inches from Mr. Moss's head. The rancher stepped back, faced the boy on the rock ledge, surprise on his wind-whipped face. The boy on the gruya wheeled his horse to face Johnny. His hand hovered over his gun. But Moss turned to him with a stern command: "Kid, get back to the herd. That's an order!"

The boy's eyes were pinpointed now. But he feared his boss more than he feared Johnny's gun. He turned at last, galloped off.

"Please," Johnny entreated again, "don't make me shoot you, Mr. Moss."

The cattleman stood there, one hand on the gate. But he didn't try to open it. He was watching Johnny's strained



ARCHERY

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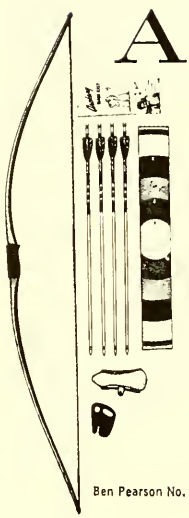

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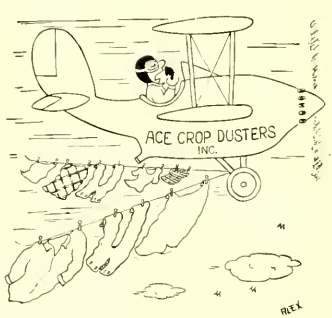


"Don't be ridiculous! Why would a lady be waiting for me at the airport with a shotgun?"

face. Suddenly a faint smile broke the tightness of his lips.

He walked his horse up to the rock ledge, leaped up to Johnny's side. "You're a good, faithful boy, Johnny!" he said. "And I want to tell you something right now before the herd gets here."

"I gave him my promise . . ."

"That you did." Then suddenly Mr. Moss's hand was on his shoulder. "But, Johnny, nature is bigger than both of us now. Look at the herd!"

Johnny raised his eyes. He saw not a dozen or 50, but hundreds of frenzied cattle forging forward. It was like a stampede. Nothing could change the direction of the herd now. They smelled water; they were heading for it.

Johnny's eyes were filled with trouble as he watched the cattle come tearing toward the stick fence.

The forerunners of the herd already were abreast of the stick fence. They milled in front of it. Then the cattle back of them rushed forward. There was a splintering of wood. Suddenly a section of the fence was down. Cattle were rushing toward the pond, drowned in a dust cloud of their own making.

"Johnny, you tried!" Mr. Moss shouted.

Mr. Moss shoved some kind of paper into his pocket, shouting in his ear all the while. Then he was gone: the cattle, too. The pond was empty—just a puddle of hoof-marked mud.

Johnny was still amazed at it all to realize that Mr. Moss had shouted something wonderful at him. Finally he took Moss's crumpled paper from his pocket and read hurriedly. Tears were in his eyes now. He wiped them away, climbed off the rock, and started to round up the scattered lambs.

Mr. Henderson and Miguel found him two days later on the far side of the Callao Sinks in the small valley where there was still a bit of grass and water—not enough for the big herd of cattle Mr. Moss ran, but enough for a small flock of lambs.

Johnny started to explain, but Mr. Henderson's hand on his shoulder stopped him. Mr. Henderson's eyes were smiling, gracious.

"I know all about it, Johnny," he was saying. "I met Moss, coming back from Wachita. He told me how brave you were, how you tried to stop him, but the herd smelled the water, and tore down the fence. The pond saved his cattle, Johnny, so in appreciation he gave you the grazing rights for the valley to save our prized lambs . . ."

Johnny was too happy to answer. He gazed upward at the sky. There was not a single cloud visible. But he knew the valley grass would last for weeks. Surely God would send the rains by then. He said a prayer of thanksgiving and turned happily back to the flock.

History of the Breed

The Santa Gertrudis

AS THE American consumer's demand for beef spelled the end of the Texas Longhorn around the turn of the century, a new beef breed became a necessity. The new breed would have to endure the long periods of drought, scorched vegetation, and scattered water holes so characteristic of the south Texas cattle country. And so evolved the Santa Gertrudis breed—the first breed of beef cattle developed in the Western Hemisphere.

The huge King Ranch of south Texas, founded in 1883 by Captain Richard King, originally ran herds of Longhorn cattle. Although these were hardy animals, they produced carcasses as tough as the hides they were wrapped in. King's first attempt at upgrading was the importation of Herefords and Shorthorns from Europe to his sprawling ranch.

By 1910, the King Ranch began crossing Shorthorns with the Brahman. After 10 years, a large red crossbred bull calf was born and named "Monkey" because of his playful antics. This historic cherry-red animal had inherited the best qualities of both his sire and dam.

His dam was 1/16 Brahman and 15/16 Shorthorn; his sire was a 7/8 bred Brahman bull. By the time Monkey was a year old, he already weighed 1,100 pounds. He was put into the breeding herds of Brahman-infused Shorthorn cows in 1923, and began showing his capabilities as a great herd sire. He sired more than 150 useful sons before his death in 1932. Thus, Monkey became the foundation sire of the breed, and all Santa Gertrudis cattle are now descended from him.

By selective line breeding, occasional inbreeding, and skillful mass selection, Monkey's characteristics were rapidly established among the descendants of the original Shorthorn breeding herds. By 1940, a large herd of these improved cattle had been evolved on the King Ranch. Their name was taken from the Santa Gertrudis land grant conferred by the Crown of Spain, which is now the 940,000-acre King Ranch.

This same year, 1940, the U.S. Department of Agriculture recognized the Santa Gertrudis as a pure breed of beef cattle. The opportunity for other ranchers to develop herds had opened, and many Texas herds were developed from King Ranch bulls with a commercial cow basis. Although the King Ranch does not sell females, another pioneer, Richard King, a grandson of the Ranch's founder, began selling select cows obtained from his portion of the King Ranch estate.

In 1950, a group of Santa Gertrudis breeders met at the King Ranch to discuss the forming of a breed association. On April 9, 1951, a charter was filed with a beginning membership of 169 breeders. The Santa Gertrudis Breeders International now has its own building at Kingsville, Texas, and classifies cattle according to the official Standard of Excellence. More than 15,000 Santa Gertrudis cattle are registered each year.

The average Santa Gertrudis cow weighs over 1,200 pounds at maturity, while bulls top 1,700 pounds in pasture condition. Two of the breed's best known traits are fast rate of gain and ability to finish without excessive waste fat. They are no longer limited to environment, although they were bred for hot climates. Today, there are herds as far north as Alaska, and they appear in 47 states and 46 countries around the world. The Santa Gertrudis development is a big chapter in the history of the American cattle industry.

Operation Sprayday is bringing better days for farmers and cheaper food and clothing for all Americans.

Farming from the AIR!

By Bernard DeRemer

THE TALL bronzed young pilot looked like a man from Mars as he finished adjusting his nylon flight suit, crash helmet, goggles, and respirator. Close by, his ground crew finished mixing and loading more than half a ton of chemicals into a special hopper on a high-wing, single-engine airplane.

Larry pulled on his gloves, climbed into the cockpit, and revved up the special agricultural aircraft. Then he gunned it down the dirt runway, taking off into the early morning sun.

Soon he was approaching his first "target"—a green and brown checkerboard of plowed fields and growing crops. He dropped to a few feet over the cotton. Then he pulled a lever opening his spray attachment and made a lengthwise crosswind pass over the field, followed by a V-shaped dust trail.

Why spray crops from the air? Crops sprayed by airplane when the ground is too wet for any other method give a real advantage in crop protection. Aerial application will not damage growing crops or pack the ground, as would heavy ground-operated equipment.

Speed and timing are always important advantages, but this is particularly true in the case of huge invasions, large areas, or certain insects which must be hit during the brief period when they are most vulnerable. Many times one plane can do much more work in less time than several tractors and operators. Aerial application is required in such situations as fighting grasshoppers on rough range land, forest pests, and insect abatement in swamps.

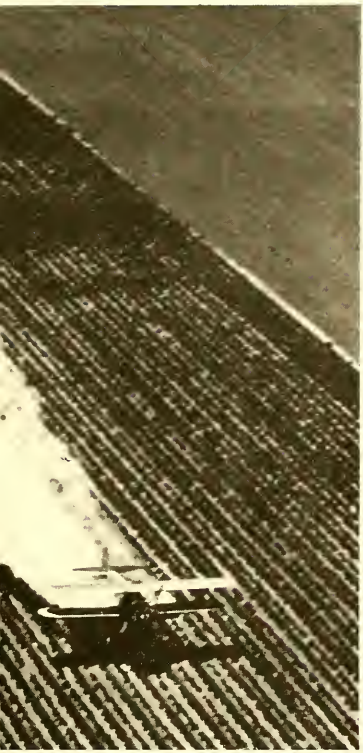
In 1960, the latest year for which complete statistics are available, 51,978,000 acres were treated (about 15 percent of all cropland in continental U.S.) in 889,100 flight hours. This spraying was done mainly to control insects but also to battle plant diseases, weeds and brush, apply fertilizer, and even in seeding operations.

But aerial spraying has its disadvantages as well. On small farms it may be too expensive to be practical. However, you and some of your neighbors could form a "spraying ring" something like the old-time threshing ring. Sometimes combining several small fields makes a profitable order for an aerial applicator, and the owners would then share the cost.

Costs vary quite a bit, however. Here are some examples: In the southeastern states and Delta region, applying insecticides to cotton by airplane dusting costs $1.00 to $1.25 an acre, defoliation a little more. In California costs were $2.00 to $2.25 an acre, since more ma-

When this spray solution is loaded, this Stearman crop-dusting airplane will treat hundreds of California acres.

A closeup of the Swathmaster applicating unit mounted under the wing. Most planes are now single-wing craft.



terial was used here. Ground application was not too much different; it ran somewhat less for smaller fields.

In Kentucky, aerial dusting of tobacco in small acreages costs an average of $4 to $5 per acre.

This is all custom work, of course. The farmer hires someone to do it for him. In most cases, especially with small farmers, there is no written contract but simply a verbal agreement—"Will you spray the 'South 40' next week?"

A National Aviation Trades Association survey a few weeks ago showed a range of 17 to 164 in number of acres covered per airplane operating hour. Large acreage, naturally, was in forest and range work, while low acreage was in small field and truck garden areas. The average for most types of application was given as 40 to 50 acres per airplane operating hour.

As a general rule, livestock should be kept out of the field being sprayed, and you might want to notify neighbors to be sure none of their animals would be too close. If it's too windy, the applicator cannot spray because of the possibility of drift.

How do you know whether you should spray? First of all, you consider the size of your place, crop condition, and similar factors. In addition, you may need word from an expert, such as your advisor, county agent, or state experiment station. All will be glad to help.

What does all this mean to you? Just how dangerous—or safe—is aerial application on your farm?

In a copyrighted interview with *U.S. News and World Report* of November 26, 1962, Dr. Bryon T. Shaw, Administrator of the Agricultural Research Service, emphasized that most chemicals used as insecticides are poisonous ". . . so we do have to be careful. At the same time, we have many regulations established by law and administered by the Government that give great protection to the people. If chemicals are used in the way that they are approved for use by the Federal Government, they will be safe . . ."

Larry has over 4,000 colleagues in the United States. Slightly more than half of all aerial application operators are located in western and southwestern states. The central region is next, with southern and eastern states listing the fewest operators. A number of bills are pending in Congress and state legislatures which would affect the aerial application in various degrees.

Farming from the air is designed to help you fight your insect enemies—and win!

Photos courtesy of National Aviation Trades Association and Transland Aircraft

Flying only a few feet above this large onion field, this crop dusting plane demonstrates how it can place a swath with accuracy and virtually no drift.

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By Jack Smothers

DON'T REACH for that saw and paint brush too soon! Fact is, poor planning can cause exhibits to fail quicker than bad construction. So give yourself a better chance of producing a winner—and make building it easier, too. Set up a solid foundation first with good planning and design. Here are some pointers.

Choose a simple idea and treat it simply. This is pointer No. 1. Don't try to present more than you—and the viewer—can handle.

Be selective. Hit the main points, but hit them hard and fast. Toss out everything that doesn't contribute to a single story. Forget the details. They don't belong in an exhibit.

Select a suitable theme. Look over your subject matter. If you see the story told in terms of many pictures that need only brief copy, then your subject is probably a good one for an exhibit. Remember, you have about 30 seconds to catch the viewer's attention and to tell him something.

Determine your purpose. Purpose is not the same as subject. You might call it your exhibit's attitude toward the subject. Bring your purpose into sharp focus through such questions as: Do I want my exhibit to convince the viewer to take action, help him solve a problem, change his opinion about something, or tell him something new about a familiar subject?

Whatever your purpose, have one. Otherwise, you may end up with too many unrelated elements with too little interest for viewers.

The ABC's of your story line. Many subjects lend themselves to a story line of three steps: (A) problem, (B) solution, (C) benefits. All three should show the viewer a practical solution to his own problems and the resulting benefits.

Find out the size and shape your exhibit will occupy. Also, find out what general lighting the space already has—for instance, overhead lights or windows.

Surroundings. If you can find out in advance about nearby exhibits, it will help you plan one that stands out by contrast. Surroundings also affect how far most viewers will be from your exhibit and the size each element must be. Fire regulations that might affect your exhibit because of materials or lighting used are also important.

The layout is your main design tool. It should pull together related areas and guide the viewer's attention from one part to the next. He'll then understand your over-all story, not just notice separate parts. Strive for a simple design with no crowding.

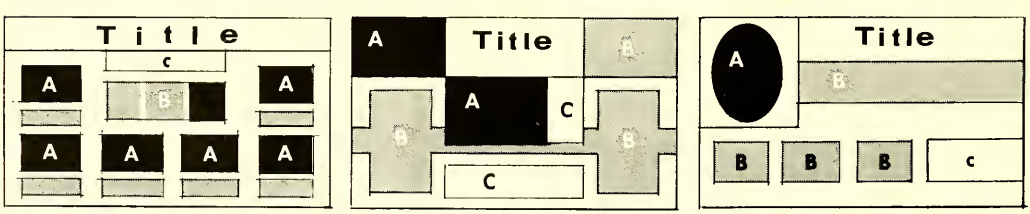
One good layout approach is to follow these ABC's: (A) attention-getter, (B) supporting facts, (C) action step or conclusion. Put your center of interest (Step A) at about eye level, but not in dead center.

Plan your full color scheme before starting to paint. (Paint stores have color charts you'll find useful.) Keep your colors in harmony with light pastel shades for the background and a brighter color for accents. Don't use raw, glossy colors.

Avoid glare and shadow in lighting. Use soft general lighting for the background and brighter light to emphasize main points. If your exhibit is small, though, don't use too many kinds of lights. They'll confuse more than they illuminate. Clip-on lights and gooseneck lamps are handy, inexpensive light sources.

"The less said, the better" is a good rule in writing your text. Titles should

Planning your layout for the exhibit calls for trial and error, plus a sketch pad. Notice below how Layout No. 1 tries to include too much, with clutter and confusion as the result. No. 2 is a step in the right direction. The last version has balance and organization of elements and draws attention.



be brief (four or five words), descriptive, and arouse attention. There are no simple rules on writing a good title. Generally speaking, though, the title that contains an active verb and relates directly to the viewer is best.

Remember that good exhibits are a visual medium that SHOW what their message is. If you have a picture that needs heavy explanation, then don't use it. Exhibits are a poor place to read. Viewers are usually standing, moving, and have an obstructed view. If you can't pare down a big chunk of copy—say around 150 words—separate it into several smaller sections. Don't place them, though, so that the viewer isn't sure what follows what. And use everyday words; they insure quick understanding by the greatest number.

As for lettering, first of all make it readable. If fancy lettering detracts from legibility, forget it. The same goes for making ornate letters out of materials like rope or bark. Capitals are good for titles, but lowercase letters (such as these) are easier to read for text matter. You're better off not using hand lettering unless you have a knack for it or can work with a professional.

Cutout, gummed, and transfer letters for your main title are professional-looking, inexpensive, and simple to use. Your local art supply store should have them. For regular text material, photostatic enlargements of copy typed with a good typewriter on light index card stock are attractive, clean, and neat. Photostats can also be used for blowing up sections of posters, leaflets, or magazines.

Speaking of words, here's a final one: a good plan for an exhibit counts more than money and materials. Allow time to plan thoroughly and you're much more likely to develop a winning idea.

◆◆◆

City Cousin

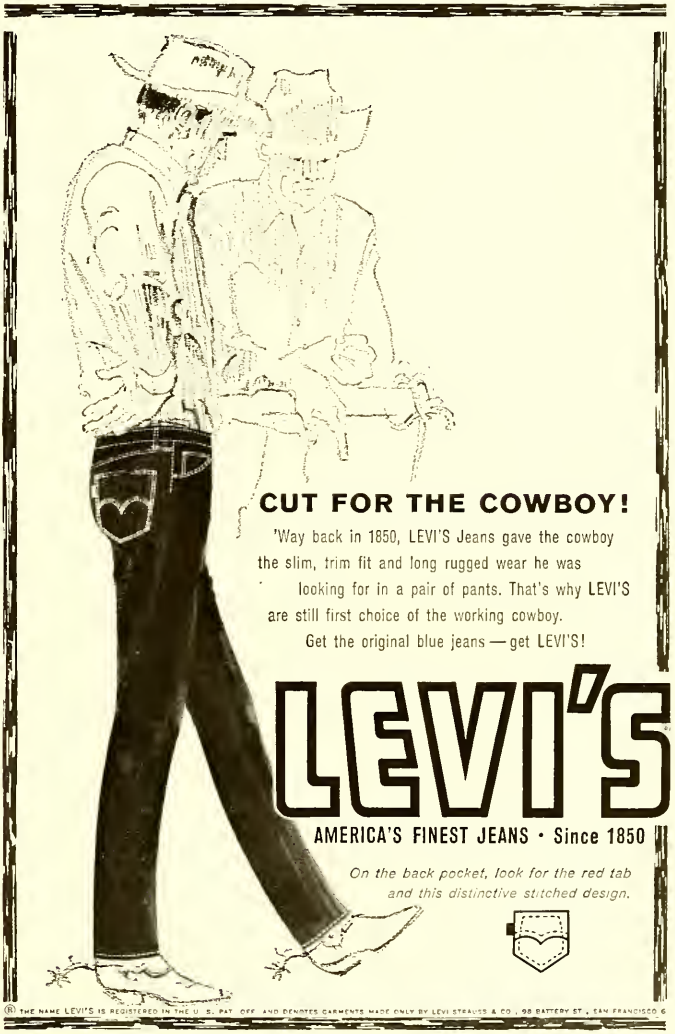
"Just a note telling them how much milk we want."

ODE TO THE FARMER

By Glee Gasper

Science says about the Earth
That every year she gains in girth;
For out of space do fall
Comets and asteroids, large and small,
Which then explode and turn to dust
And add a little to the crust
On Old Mother Earth!

So, young man, be not afraid
To work with what your dreams are made!
If you wish to soil your hands
In service to the mighty lands,
Dig in and do as you must,
For you CAN plow in stardust
On Old Mother Earth!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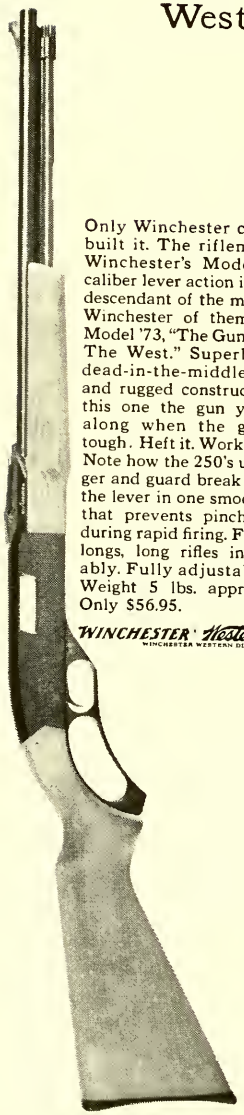

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Sportrait

Don Drysdale, right-handed pitcher of the Los Angeles Dodgers.

By
Stan Allen

MOST baseball experts predicted that the National League's top pitcher in 1963 would be Don Drysdale of the Los Angeles Dodgers. Their thinking was based on his 1962 performance.

Don had his best season last year, leading the National League with 25 wins against only nine losses. These were the most wins by a National League pitcher since 1956, and at one point—from June 19 through August 11—he won 11 games in a row. He didn't serve up a gopher pitch in his last 10 games. He started 41 games in pitching 314 innings, which led the League in both of those departments, and completed 19 of those games. Don finished the season with a fine 2.84 earned run average, and his 232 strikeouts were tops in the league. He actually beat each National League team twice last year, winning at least one game in every ball park in the League.

Only 27 years old now, Don is a veteran of seven major league seasons. He has come a long way since leaving the American Legion diamonds in Van Nuys, California, where he was born and raised. His dad, a former minor league pitcher, had Don playing organized ball before he was 10 years old. As a youngster he played all of the infield positions and caught but did not pitch. He was called on to pitch in an emergency during a Legion game when he attracted the attention of a Dodger scout. He was only 17 when he signed a Dodger contract and reported to Bakersfield in the California League.

Don got off in a winning way with eight wins against five losses in that first season. He finished with a respectable 3.45 earned run average and recorded 73 strikeouts. Most important, he hung on to finish 11 of the 14 games he started. This performance earned him a promotion to the Dodgers' Montreal farm club in 1955, where he split the season with 11 wins and 11 losses. His ERA dropped a bit to 3.33, but he whiffed 80 batters.

He was called up to Ebbets Field in 1956, when the Dodgers were still in

Brooklyn, and has been in the majors since then. He had another .500 record in 1956 but finished with a 2.64 earned run average. Don came back strong in 1957 with 17 wins and nine losses to write a good finish to the Dodgers' swan song to Brooklyn. His fine 2.69 earned run average in 1957 took second place in League standings. The move to the West Coast did not seem to help Don, as he posted a losing record in 1958, but he bounced back in 1959 with a 17-win and 13-loss season. He led the League in strikeouts that year with 242 and came back in 1960 to fan 246 batters to lead the League for the second year in a row. His 182 strikeouts the following year were good enough for third place in League standing, and then he took the League lead again in 1962 with 232. Don is the only active major league pitcher to hurl three 200-strikeout seasons. In fact, Grover Alexander, Dazzy Vance, and Christy Mathewson are the only other pitchers in modern National League history to do so.

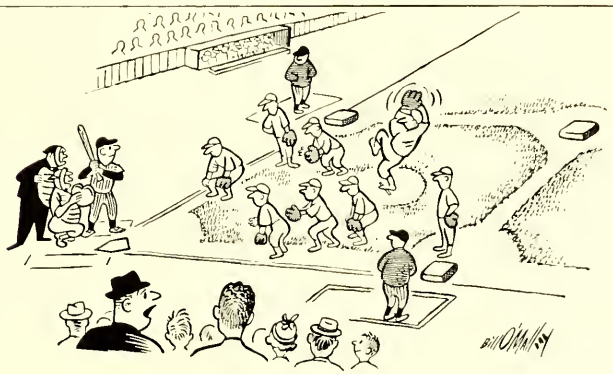
Don lost one record last season, that of hit batsmen. His low-burning-point temper has earned him a reputation of letting a pitch go at the batter when the hitters try to dig in at the plate against him. His record went from 20 in 1961 to only 11 last season. Drysdale is a big fellow, standing 6 feet 6 inches tall and weighing around 205 pounds, which puts plenty of zip on his fast ball. In his years of play around the infield, making quick snap throws to get a runner, he developed a natural sidearm delivery that he has never changed. When he winds up those long arms and lets go with his sidearm pitch, the batter does not have too long to look at the pitch. He has a good curve and slider pitch to help him, but his blazing fast ball is enough to make most hitters hope for a walk.

Don is also one of the National League's best fielding pitchers on defense, and his 60 assists last year topped the League. He led this department in 1948 with 48 and again in 1957 with 60. Don won baseball's coveted Cy Young Award last year and pitched in the first All-Star game played at Washington, D. C. This was his third All-Star appearance, and although he does not have a won-lost record, he has allowed only five hits in the nine innings pitched. He struck out 12 batters in those nine innings. Don has also pitched in two World Series games with one win and no losses. He owned a fine 3.00 earned run average in World Series play.

In his seven years of major league play, Don compiled an amazing record of 104 wins against only 73 losses. He has fanned 1,236 batters and owns a fine lifetime earned run average of 3.21. He has started 150 games from 1959 through 1962 and completed 59 of those, which is almost 40 percent of his games started. His earned run average has been under 3.00 four different seasons. Almost midway through the 1963 season, Don has pitched 154 innings for nine wins against nine losses. His earned run average is a fine 2.92 and he has already fanned 126 batters, which will probably see him finish first in both departments this season.

At 27, Don Drysdale is just reaching his peak. He should have at least four seasons to worry the National League hitters and enter quite a few more marks in the record books.

"I'll tell 'em I thought it meant you, and you tell 'em you thought it meant me."



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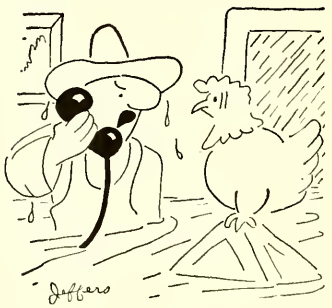


". . . Yeah, it's about that rain maker you sent over."

A teen-ager sent his girl friend her first orchid with this note: *"With all my love and most of my allowance."*

Allen Schuchardt
Boerne, Texas

Definition of a taxpayer: A man who doesn't have to pass a civil service exam to work for the Government.

Gary Akers
Chambersburg, Pennsylvania

Bobby: *"What did the papa lightning bug say to the mama lightning bug?"*

Robby: *"I don't know. What?"*

Bobby: *"Isn't Junior bright for his age?"*

Dallis Poppen
Wyndmere, North Dakota

"Farm products sure cost a lot more than they used to," the city visitor complained to the local farmer.

"Yeah, and why not?" retorted the farmer. *"Why, when we farmers are supposed to know the botanical name for what we're raising, the zoological name of the insect that eats it, and the chemical that will kill it, somebody has to pay!"*

Ronnie Sullivan
Hughes, Arkansas

A little boy was boasting to his playmate: *"My daddy is a Lion, a Moose, an Eagle, and an Elk."*

"He is?" gasped the other boy. *"Do you keep him in a cage?"*

Ernest Miller
Lansing 10, Michigan

Mother: *"Well, son, were you a good boy in school today?"*

Son: *"Sure, how much trouble can you get into standing in a corner all day?"*

Harry Naftzinger
Bernville, Pennsylvania

A plumber, arriving six hours after a call, asked: *"How are things, Mr. Smith?"*

Mr. Smith: *"Not too bad. While we were waiting, I taught my wife how to swim."*

David Mullins
Nettie, West Virginia

Son: *"Were Ben and Eve the first humans on earth?"*

Father: *"No, Adam and Eve."*

Son: *"I knew it was one of those Cartwrights."*

Gerald Guidry
Iowa, Louisiana

A couple arrived during the fifth inning.

"What's the score, Jim," he asked a fan.

"Nothing to nothing," was the reply.

"Oh, goody!" she exclaimed. *"We haven't missed a thing."*

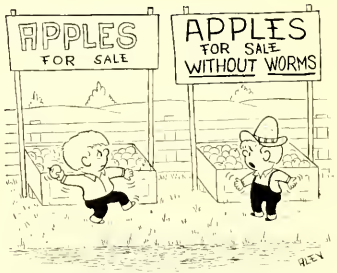
Jerome Sturgeleski
Sturgeon Lake, Minnesota

The accountant's little boy interrupted his bedtime story, "Cinderella," to ask: *"When the pumpkin turns into a golden coach, is that regarded as straight income or capital gains?"*

Mike Dawson
Kirbyville, Missouri

It's hard to lose a friend
When your heart is full of hope,
But it's worse to lose a towel
When your eyes are full of soap.

Gary Britton
Taylor, Nebraska



"For goodness' sake, George! I'm not saying anything about your merchandise!"

A father of four has been visiting the psychiatrist daily. *"Nothing is bothering me,"* he explained. *"But this is the only place I can lie down without being disturbed."*

Gail W. Burleigh
Lewistown, Montana

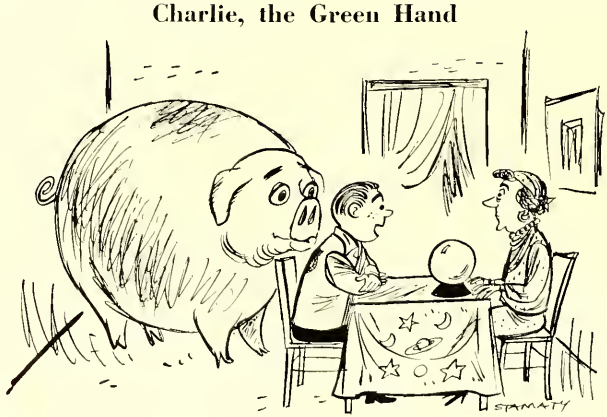
The class was having a composition lesson. The teacher instructed: *"Do not imitate what other people write. Simply be yourself and write what is in you."*

Following this advice, Tommy turned in the following composition:

"We should not imitate others. We should write what is in us. In me there are my stomach, heart, liver, two apples, one piece of pie, a lemon drop, and my lunch."

Connie Parker
Scio, Oregon

Charlie, the Green Hand



"Can you tell me if it's his glands or the new feed I'm using?"

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